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VOLUME IV
APPROVED PROGRAMME OF ACTION FOR PHASE II
1984-1988

TRANSPORT PROGRAMME
PROJECT PROFILES

PART I (A) ROADS AND ROAD TRANSPORT

UNITED NATIONS TRANSPORT AND COMMUNICATIONS
DECADE IN AFRICA, 1978-1988

Volume IV

ROADS AND ROAD TRANSPORT

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Project No. ROP-01-001

ALGERIA: STUDY ON A HIGHWAY LINK BETWEEN ANNABA-CONSTANTINE-ALGIERS-ORAN (1200 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Study relating to the construction of a 1,200-km highway: Annaba-Constantie-Algiers-Oran which is part of the Tangier-Rabat-Cairo Trans-African link

Location: Northern Algeria

Cost: $6.00 million

External financing required: $6.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Public Works

Project management authority: Ministry of Public Works

II. Description

1. Aim and objective

Starting in 1985, an ambitious programme on transport infrastructure will gradually be implemented throughout the country. The studies will lead to the construction of a wide road, which will allow safe and rapid flow of traffic and which matches traffic estimates.

2. Nature and constituent parts

The project consists of studies for the construction of a wide read between Annaba, Constantine, Algiers and Oran. The layout of the road, and the structures to be constructed, among other things, are yet to be determined. Right from the beginning, the road was envisaged to be a two-lane dual carriageway.

III. Justification, economic and financial analysis

1. Context and benefits

The advantage of a link, which is a section of the Tangiers-Rabat-Cairo Trans-African highway, is first of all to make traffic safe and reliable on this major road in the north of Algeria. The road goes through the most densely populated area in Algeria. Economic activities which are already well developed here have the potential for further expansion. On the whole, the expected rapid economic development during the next decade and the will to decentralize economic activities and limit urbanization throughout the country, calls for the construction of a sufficiently dense and balanced communication network. This will make it possible to ensure a better interplay of supply and demand in the economy. An integrated organization for development of the economy is one of the major concerns in national development.

2. Cost

The cost of the project is estimated at $6.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected	:	Nil
External financing secured	:	Nil
External financing required	:	$6.00 million

Project No. ROP-02-001

ANGOLA: STUDY ON THE OMBACA-LUCIRA ROAD (402 KM)

I. **Identification and summary**

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Studies for the construction of the Ombaca-Lucira Namibia border road (402 km)

Location: Angola

Cost: $2.00 million

External financing required: $2.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Transport and Communications

Project management authority: Department of Roads

II. Description

1. Aim and objective

The objective of the project is to carry out studies for the construction of a road link between Ombaca-Lucira and the Namibia border.

2. Nature and constituent parts

The project comprises engineering studies leading to the eventual construction of a 402 km road to link Angola and Namibia.

III. Justification; economic and financial analysis

1. Context and benefits

The study will be followed by the construction of a bitumen surfaced road which will pass through areas with a high economic potential, by virtue of the rich mineral resources available there. The road will also help improve provision of supplies for the big centres along its course

2. Cost

The cost of the project is estimated at $2.00 million.

IV. Status

No information available at the moment.

V. Finaning

Local financing received or expected	:	Nil
External financing secured	:	Nil
External financing required	:	$2.00 million

Project No. ROP-02-002

ANGOLA: STUDY ON THE NOVA CHAVES-LUAU ROAD (120 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Studies for the construction of the Nova Chaves-Luau (Zaire border) road (120 km)

Location: North-eastern Angola

Cost: $0.60 million

External financing required: $0.60 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of Transport and Communications

Project management authority: Department of Roads

II. Description

1. Aim and objective

The objective of the study is to determine the technical and economic benefits the area served would derive from the road.

2. Nature and constituent parts

The project consists in undertaking studies on the 120 km. Novas Chaves-Luau (Zaire border) road.

III. Justification; economic and financial analysis

1. Context and benefits

The project is part of the technical and economic studies on the Tripoli-Windhoek highway and relates to an area with a very high economic potential, particularly iron ore.

2. Cost

The cost of the project is estimated at $0.60 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected	:	Nil
External financing secured	:	Nil
External financing required	:	$0.60 million

Project No. ROP-02-003

ANGOLA: STUDY ON THE NEGAGE-MAQUELA-BANSA-SOSSÔ-ZAIRE BORDER ROAD (290 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with a subregional impact

Nature: Study on the 290-km road connecting Angola to Zaire

Location: North-Western Angola

Cost: $1.45 million

External financing required: $1.45 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Transport and Communications

Project management authority: Department of Roads

II. Description

1. Aim and objective

The objective of this project is to determine the technical and economic advantages of the road linking Angola to Zaire via Negage, Ridzbana Sossa (290 km).

2. Nature and constituent parts

The project consists in undertaking studies for the bitumen surfacing of the road in accordance with international standards.

III. Justification, economic and financial analysis

1. Context and benefits

When constructed the road will facilitate transport between Angola and Zaire and enhance the economic complementarity of the two states.

2. Cost

The cost of the studies is estimated at $1.45 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected	:	Nil
External financing secured	:	Nil
External financing required	:	$1.45 million

Project No. ROP-02-004

ANGOLA: STUDY ON THE CUITO-CUANAVALE-LUIANA ROAD (650 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Study for the construction of a 650-km road connecting Angola to Zambia

Location: South-eastern Angola

Cost: $3.25 million

External financing required: $3.25 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Transport and Communications

Project management authority: Department of Roads

II. Description

1. Aim and objective

The objective of the project is to undertake studies for the construction of a road between Angola and Zambia. (650 km)

2. Nature and constituent parts

The project comprises economic and engineering studies to determine how beneficial the road will be to the areas served.

III. Justification; economic and financial analysis

1. Context and benefits

The road will link Angola to Zambia, a land-locked country and provide it with an access to the Lobito port.

2. Cost

The cost of the studies is estimated at $3.25 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected	:	Nil
External financing secured	:	Nil
External financing required	:	$3.25 million

Project No. ROP-02-005

ANGOLA: STUDY ON THE LUCUSSE-LUMBALA-CARIPANDE ROAD (248 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Study for the construction of 248 km bitumen-surfaced road

Location: Eastern Angola

Cost: $2.20 million

External financing required: $2.20 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Public Works

Project management authority: Department of Roads

II. Description

1. Aim and objective

The study is aimed at the construction of a 248 km. Bitumen surfaced road between Angola and Zambia via Lucusse-Lumbala.

2. Nature and constituent parts

The project consists in undertaking engineering and economic studies for the construction of a 248 km. Bitumen surfaced road between Lucusse and the Zambia border.

III. Justification; economic and financial analysis

1. Context and benefits

The construction of the road will yield obvious benefits for the areas served, increasing trade between them and helping to open up Zambia.

2. Cost

The cost of the project is estimated at $2.20 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected	:	Nil
External financing secured	:	Nil
External financing required	::	$2.20 million

Project No. ROP-03-001

BENIN: BITUMEN SURFACING OF THE SAVALOU-DJOUGOU ROAD (221 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Bitumen surfacing of 221 km of road

Location: Central and north-western Benin

Cost: $40.00 million

External financing required: $40.00 million

Duration: Five years

Desirable starting date: 1984

Project initiator: Ministry of Supply, Construction and Housing

Project management authority: Highways Department

II. Description

1. Aim and objective

The road links Zou and Atakora provinces, establishing a western link between Central Benin and the north-western province, of which the road would be the major link.

2. Nature and constituent parts

It consists of bitumen surfacing of a road between Savalou and Djougou (221 km).

III. Justification, economic and financial analysis

1. Context and benefits

The planned road is a shorter variation over that passing through Parakou and Savé; it will reduce by a third the distance from Upper Volta to Cotonou between Djougou and Dassa-Zoumé.

It will provide complementary access to the sea for the Sahelian regions of the Upper Volta, the Niger and Mali.

2. Cost

The cost of the project is estimated at $40.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected	:	Nil
External financing secured	:	Nil
External financing required	:	$40.00 million

Project No. ROP-03-002

BENIN: CONSTRUCTION OF TWO BRIDGES ON THE MONO (240 M) AND SAZUE (90 M) RIVERS

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with a subregional impact, improvement of a portion of the Lagos-Nouakchott Trans-African Coastal Highway for a disadvantaged country

Nature: Construction of two reinforced concrete bridges on the Mono and Sazue rivers (about 240 m and 90 m respectively)

Location: Benin-Togo border

Cost: $7.60 million

External financing required: Nil

Duration: 18 months

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Construction and Housing

Project management authority: Highways Department

II. Description

1. Aim and objective

The objective of the project is the reconstruction of the two single carriageway metal bridges on the Mono and Sazue Rivers to ease the flow of traffic on the Cotonou-Hilla Condji stretch of the Lagos-Nouakchott trans-African highway in Benin.

2. Nature and constituent parts

The project includes the reconstruction with reinforced concrete as dual carriageway bridges of the two bridges on the Mono and Sazue Rivers (240 m and 90 m respectively) and the reconstruction of their approaches to the 7 m gauge.

III. Justification; economic and financial analysis

1. Context and benefits

The two existing bridges are single carriageway metal bridges on the Benin section of the Lagos-Nouakchott Coastal Highway; they are serious bottlenecks to the to-and-from movement of vehicles. Moreover, their condition makes it impossible for them to carry the ever-increasing traffic.

Constructing these two bridges will make it possible to guarantee the free flow of traffic on this stretch and avert the considerable losses of time due to prolonged stops at these bridges, and enhance the expansion of trade among countries in the subregion.

2. Cost

The cost of the project is estimated at $7.60 million.

IV. Status

Feasibility and engineering studies have been carried out by the Government.

V. Financing

Local financing received or expected	:	$1.60 million
External financing secured	:	$6.00 million
External financing required	:	Nil

Project No. ROP-03-003

BENIN: STUDY ON THE SEME-COTONOU-GODOMEY ROAD (30 KM) AND THE THIRD COTONOU BRIDGE

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Feasibility and engineering studies on the third Cotonou bridge and the Sèn-Cotonou-Godomey road

Location: Southern Benin

Cost: $0.60 million

External financing required: Nil

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Construction and Housing

Project management authority: Highways Department

II. Description

1. Aim and objective

The objective of this project is to regulate traffic in Cotonou by construc ing a third bridge to ease the flow of traffic from neighbouring countries.

2. Nature and constituent parts

The project involves feasibility and engineering studies in view of the construction of a third bridge over the Cotonou lagoon thus ensuring the flow of transit traffic from ECOWAS countries and solving the capital's traffic congestion problems. Indeed, according to information obtained during recent vehicle counts (1979-1980) more than 6,000 vehicle circulate in Cotonou - in addition to those coming from or going to ECOWAS countries. Such traffic is too heavy for a town with only two points of entry and exit. So, Cotonou causes traffic to jam. The bridge will make it possible to ease the traffic. The expressway will also help to ease the traffic in the region.

III. Justification, economic and financial analysis

1. Context and benefits

This project will make it possible to ease congestion in the urban area, deviate part of the international traffic to this road; speed up the flow of traffic; increase road safety and lessen accident risks.

2. Cost

The cost of the project is estimated at $0.60 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected	:	Nil
External financing secured	:	$0.60 million
External financing required	:	Nil

Project No. ROP-03-004

BENIN: CONSTRUCTION OF THE DASSA-ZOUME-PARAKOU ROAD (230 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Construction of a 230 km bitumen surfaced road between Dassa-Zoumé and Parakou

Location: Centre-eastern part of Benin

Cost: $40.00 million

External financing required: $40.00 million

Duration: Three years

Desirable starting date: 1983

Project initiator: Ministry of Public Works, Construction and Housing

Project management authority: Highways Department

II. Description

1. Aim and objective

The purpose of the project is to construct a 220 km road between Dassa-Zoume and Parakou in order to establish a permanent road link between southern and northern Benin and to promote trade with Niger and with the markets of neighbouring countries.

2. Nature and constituent parts

The project consists mainly of the construction of a road with a design speed of 100 kph, a roadbed 10 m wide a bitumen surface roadway 7 m wide and a cross fall of 2.5 per cent.

The existing road is out of use and several sections of it are badly deteriorated; the road goes through the regions of Dassa-Zoumé, Glazoué, Savé Kilibo and Tchaourou.

III. Justification, economic and financial analysis

1. Context and benefits

This road will help to develop trade and international transport between Benin and the neighbouring countries to promote the expansion of trading activities with Niger and with international markets and to service the Savé region where an agro-industrial sugar complex is located.

2. Cost

The cost of the project is estimated at $40.00 million.

IV. Status

Feasibility and engineering studies are completed.

V. Financing

Local financing received or expected	:	Nil
External financing secured	:	Nil
External financing required	:	$40.00 million

Project No. ROP-03-005

BENIN: STUDY ON THE ABOMEY-KETOU-ILLARA ROAD (115 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Study for the bitumen surfacing of 115 km of road between Abomey and Illara

Location: Between central part of Bénin

Cost: $0.50 million

External financing required: $0.50 million

Duration: Two and a half years

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Construction and Housing

Project management authority: Roads Department

II. Description

1. Aim and objective

The study relates to the upgrading of the road to international standard and its bitumen-surfacing.

2. Nature and constituent parts

The project consists in undertaking studies for upgrading the road to international standard with:

- a design speed of 100 km/h,
- a roadbed of 10m wide and
- a roadway of 7m large.

III. Justification: economic and financial analysis

1. Context and benefits

This inter-state highway links Togo to Nigeria via Bénin. The improvement of the Abomey-Ketou-Illara section will make it possible to have a continuous all-weather road link between Togo and Nigeria and will promote the development of trade and transport between the three countries. Besides the improvement of the road will make it possible to provide service to the agricultural areas in northern and southern Bénin and facilitate the evacuation of cement from the Oniebolo factory to Nigeria.

2. Cost

The cost of the studies is estimated at $0.50 million.

IV. Status

The feasibility study was undertaken in 1983, financed locally. This will be followed by detailed engineering studies and the preparation of tender documents in 1984.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.50 million

Project No. ROP-03-006

BENIN: ENGINEERING STUDY ON THE DJOUGOU-PORGA ROAD (225 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Engineering studies of 225 km of road between Djougou and Porga

Location: North-Western Bénin

Cost: $0.70 million

External financing required: $0.70 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Construction and Housing

Project management authority: Department of Roads

II. Description

1. Aim and objective

The objective is to undertake engineering studies for the improvement of the 225 km road between Djougou and Porga.

2. Nature and constituent parts

The project consists of engineering studies for the bitumen surfacing of the road linking the Zou and Atabora provinces making it an all-weather road.

III. Justification: economic and financial analysis

1. Context and benefits

Two types of benefits are to be derived from the proposed project:

Within the Atacora province, this road will be route connecting the various areas;

It will also serve as the main link with other regions: Atacora will be connected to the Zou province and beyond that to three other regions in the south, and thus speed up national integration and also promote tourism. The road will also link central Bénin to Upper Volta and Mali.

2. Cost

The cost of the engineering studies is estimated at $0.70 million.

IV. Status

Only the feasibility study has been undertaken.

V. Financing

Local financing expected or received:	Nil
External financing secured:	Nil
External financing required:	$0.70 million

Project No. ROP-05-001

BURUNDI: STUDY ON THE GITEGA-MUYINGA ROAD (92 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with a subregional implications for a disadvantaged country

Nature: Feasibility study and engineering studies for the bitumen surfacing of a road between Gitega and Muyinga (92 km)

Location: North-eastern Burundi

Cost: $0.64 million

External financing required: $0.64 million

Duration: One year

Desirable starting date: 1985

Project initiator: Ministry of Public Works, Mines and Power

Project management authority: Ministry of Public Works, Mines and Power

II. Description

1. Aim and objective

The aim of the project is to carry out feasibility and engineering studies leading to reconstruction of a paved all year round road between Gitega and Muyinga.

2. Nature and constituent parts

The project consists of the study of a road between Gitega and Muyinga. The existing road is presently being gravel-surfaced over its entire length of 92 km. No decisions have yet been taken on the proposed alignment of the bituminous road, but it is anticipated that this will approximately follow the existing alignments.

The existing road is 92 km long and the length of the proposed is yet to be determined. It will be a road with a triple surface treatment.

III. Justification: economic and financial analysis

1. Context and benefits

The proposed road has both international and national importance. The national objective of the project is to provide an all-weather arterial link between the centrally situated town of Gitega and the north-eastern town of Muyinga. The road will also provide an important international link between the central districts of Burundi and the area to the west of Lake Victoria, including the port of Bukoba.

The proposed road will form part of the main north/south international route connecting Tanzania, Burundi and Rwanda. This corridor has been identified for agricultural development, particularly in the north-eastern region around the town of Muyinga, where new satellite settlements are rapidly developing following the success of the tsetse fly control campaign in the area. There is also tourism potential in the northern area.

- This road will help to improve the international north/south link between Burundi and the United Republic of Tanzania and Rwanda in the north, reduce transport costs, and promote the general agricultural production.

These factors should stimulate the development of the region served.

2. Cost

The project is estimated to cost $0.64 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing expected or received:	Nil
External financing secured:	Nil
External financing required:	$0.64 million

Project No. ROP-05-002

BURUNDI: CONSTRUCTION OF THE RUGOMBO-KAYANZA ROAD (134 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country
for a disadvantaged country

Nature: Construction of an asphalted road between Rugombo and Kayanza (134 km)

Location: North-western Burundi

Cost: $61.70 million

External financing required: $45.20 million

Duration: Two to three years

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Mines and Power

Project management authority: Ministry of Public Works, Mines and Power

II. Description

1. Aim and objective

The objective of the project is to provide an all-weather arterial link between the north-central districts of Burundi and the north-western regions. The link will also provide an important international route between the agriculturally rich areas of ~~northern~~ Burundi and the north-western main road to Zaire and Rwanda.

2. Nature and constituent parts

The project consists of constructing a bitumen-surfaced road between Rugombo and Kayanza. The existing road between the two towns follows very wide detours through hilly terrain and the general standard of this route is very low. The surface of the existing road is generally earth along its entire length. The proposed road will be a road with a triple surface treatment.

III. Justification: economic and financial analysis

1. Context and benefits

The proposed road will form part of the east-west link in the northern region of Burundi. This region has been identified as having considerable agricultural potential but, for advantage to be taken of this, improved means of communication are needed through the difficult terrain. The road will form an extension of the Kayanza-Ngozi route.

This road will help to improve the east-west link between the northern regions of Burundi and Zaire, Rwanda and the United Republic of Tanzania, reduced transport cost, increased agricultural output, and ease the migration of people from the ~~over~~populated Ngozi area to the more sparsely populated Imbo plain.

These factors should stimulate the development of the region served.

2. Cost

The cost of the project is estimated at $61.70 million.

IV. Status

The studies are underway.

V. Financing

Local financing received or expected:	Nil
External financing secured:	$16.50 million
External financing required:	$45.20 million

Project No. ROP-05-003

BURUNDI: STUDY ON THE NYANZA LAC-MUTAMBARA ROAD (97 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Studies for the construction of an asphalted road between Nyanza-Lac and Mutambara (97 km)

Location: Southern Burundi

Cost: $2,00 million

External financing required: $2.00 million

Duration: One year

Desirable starting date: 1985

Project initiator: Ministry of Public Works, Mines and Power

Project management authority: Ministry of Public Works, Mines and Power

II. Description

1. Aim and objective

The objective is to carry out studies to build an all-weather road between the agriculturally rich area of Gihofi and the strategic town of Nyanza-Lac, both on Lake Tanganika and on the major north-south road Bujumbura-Kigoma.

2. Nature and constituent parts

The project consists of studies for the construction of a bitumen-surfaced road between Mutambara and Nyanza-Lac. The existing road has a gravelled surface. The Gihofi-Mutambara section is part of the Gitega-Gihofi road which is under construction. The proposed road will be 97 km long, 6m wide with a three-layer bitumen.

III. Justification: economic and financial analysis

1. Context and benefits

The proposed road will run through certain areas that have been identified for further agricultural development. The region is important for its agricultural production, particularly sugar in the area around Gihofi. The road will provide a much-needed link from this region to the main north-south arterial road from Bujumbura to Kigoma in the United Republic of Tanzania, and thence to Dar-es-Salaam.

This road will help to improve the east-west link from the southern regions of Burundi to the international north-south road from Bujumbura to Kigoma, reduce transport costs, increase agricultural output, and promote tourist activities.

These factors should stimulate the development of the region served by the road.

2. Cost

Cost of the project is estimated at $2.00 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$2.00 million

Project No. ROP-05-004

BURUNDI: CONSTRUCTION OF THE GITEGA-NGOZI ROAD (81 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Construction of an asphalted road between Gitega and Ngozi

Location: Central Burundi

Cost: $31.50 million

External financing required: $31.50 million

Duration: Three to four years

Desirable starting date: 1986

Project initiator: Ministry of Public Works, Mines and Power

Project management authority: Ministry of Public Works, Mines and Power

II. Description

1. Aim and objective

The objective of the project is to provide an all-weather arterial link between the administrative center of Gitega and the agriculturally important center of Ngozi in the northern district of Burundi.

2. Nature and constituent parts

The project consists of constructing a bitumen-surfaced road between Gitega and Ngozi. The existing road has a gravelled surface. It is expected that the proposed road will follow the existing alignment. The proposed road will be 81 km long, 6m wide with a ~~three-layers bitumen~~ surface.

III. Justification: economic and financial analysis

1. Context and benefits

The proposed road will provide an important link between the administrative center of Gitega and the development area around Ngozi. Ngozi lies on the proposed maineast-west corridor between the towns of Cibitoke, Kayanza, Muyange, Muyinga and Kobero.

This main east-west link has international importance and is at present in various stages of development. Certain sections are under construction while others are in the process of study and design. There is considerable agricultural potential in this east-west corridor in the northern foothill reaches of Burundi.

This road will help to improve the present regional links to the main east-west corridor, to reduce transport costs, and to increase agricultural output.

These factors should stimulate the development of the region served by the road.

2. Cost

The cost of the project is estimated at $31.50 million.

IV. Status

The studies are on-going.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$31.50 million

Project No. ROP-05-005

BURUNDI: STUDY ON THE RUYIGI-KIBONDO ROAD (47 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Study of 47 km road for the bitumen surfacing

Location: Eastern Burundi

Cost: $1.00 million

External financing required: $1.00 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Energy and Mines

Project management authority: Ministry of Public Works, Energy and Mines

II. Description

1. Aim and objective

The objective of the project is to carry out studies to build an all-weather road link between Central Burundi and North-western Tanzania.

2. Nature and constituent parts

The project consists in undertaking studies for the bitumen surfacing of the existing road, which is 47 km long and 6m wide.

III. Justification: economic and financial analysis

1. Context and benefits

The studies relate to a road which will be a section of the East-West feeder to the main North-South highway linking Burundi to Rwanda in the north and to Tanzania in the south. The road passes through an area earmarked for agri-cultural and administrative development.

The importance of this road is obvious, since it will serve as the East-West international link between eastern Burundi and North-Western Tanzania, which undoubtedly will help promote the development of the region.

2. Cost

The cost of the project is estimated at $1.00 million.

IV. Status

The project is yet to start.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.00 million

Project No. ROP-05-006

BURUNDI: CONSTRUCTION OF THE NYANZA LAC-GIHOFI ROAD (105 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Construction of the road between Nyanza Lac and Gihofi (105 km)

Location: South-western Burundi

Cost: $40.85 million

External financing required: $40.85 million

Duration: Two years

Desirable starting date: 1985

Project initiator: Ministry of Public Works, Energy and Mines

Project management authority: Ministry of Public Works, Energy and Mines

II. Description

1. Aim and objective

The objective of the project is to construct an all-weather road to link the agricultural area of Gihofi to the strategic town of Nyanza Lac. These two towns are situated on Lake Tanganyika and on the main north-south Bujumbura - Kigoma highway.

2. Nature and constituent parts

The project consists of constructing a bitumen-surfaced road in conformity with international standards. The existing road is 115 km long. The new road will be 105 km long, with 6m of surface course with a double bituminous overlay.

III. Justification: economic and financial analysis

1. Context and benefits

The proposed road will pass through an area which is intended for agricultural development. The region is in fact, important for agricultural production, particularly sugar, which is produced in the area around Gihofi.

One of the advantages to be derived from this road is the improvement of the existing east-west link between southern Bujumbura and Kigoma. It will also help to increase agricultural production and promote the development of tourism in the region.

2. Cost

The cost of the project is estimated at $40.85 million.

IV. Status

Engineering studies have been undertaken.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$40.85 million

Project No. ROP-06-001

CAMEROON: CONSTRUCTION OF THE POTOKOL KOUSSERI ROAD (102 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of the Dakar-N'Djamena highway)

Nature: Engineering studies followed by the construction of the road

Location: Northern Cameroon

Cost: $69.30 million

External financing required: $48.50 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The project meets the dual general objective of contributing to the completion of the Dakar-N'Djamena highway, one of the five trans-African highways at present under construction, and of improving access to the sea for the land-locked countries.

The aim of the project is to provide improved access to the sea for Chad. The Fotokol-Kousseri road is the shortest land link between Nigeria and Chad. It will help to promote the development of cattle rearing in Chad and enable this country to benefit from development projects such as the Ngala irrigation project in eastern Nigeria and the conventional basin irrigation project established by the Lake Chad Development Authority. The project is also designed to improve communications between Nigeria and northern Cameroon.

2. Nature and constituent parts

The present Fotokol-Kousseri road is impassable in the rainy season. It was renovated in 1969 to all-weather standard but inadequate maintenance has led to substantial deterioration of the driving surface and the formation of numerous potholes. The road has now been abandoned by traffic for parallel routes which are useable only in the dry season. Crossing of the river Chari at the end of this road has to be made by ferry. The objective of the project is to remedy this situation by bringing the road up to all-weather standard and constructing a bridge over the river Chari.

The project includes engineering studies, road improvement works and the construction of a bridge over the Chari. The present 102-km road has good vertical and horizontal alignments, but because of floods, it will be necessary to build embankments and to raise the level of a number of sections.

III. Justification: economic and financial analysis

1. Context and benefits

The Fotokol-Kousseri road is a vital link for strengthening communications among the four countries of the Lake Chad Basin Commission. The feasibility study carried out by international consultants for the Maltam-

Kousseri section shows an internal rate of return of 12 per cent which, taking account of the difficulty of assessing the resultant benefits for the development of Chad, should be considered as largely sufficient to justify the proposed improvements.

The internal rate of return for the road as a whole can be assumed to be greater than that for the section studied.

The internal rate of return for the bridge over the river Chari, where excessive waiting times are at present experienced, has been estimated at 43 per cent, which is a particularly high rate.

2. Cost

The cost of the project is estimated at $69.30 million.

IV. Status

The feasibility and engineering studies are partly carried out.

V. Financing

Local financing received or expected:	$20.80 million
External financing secured:	Nil
External financing required:	$48.50 million

Project No. ROP-06-002

CAMEROON: STUDY ON THE KRIBI-YOKADOUMA ROAD (700 Km)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Studies for the construction of a road from Kribi to Yokadouma (700 km)

Location: Southern Cameroon

Cost: $27.00 million

External financing required: $27.00 million

Duration: Three to four years

Desirable starting date: 1984

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The objective of the project is to carry out studies for the construction of an east/west road in the southern part of Cameroon, towards the Central African Republic which, after extension of the road in Central African territory, will have additional access to the sea. The aim of the project is, at the same time, to facilitate the development of southern Cameroon.

2. Nature and constituent parts

The project consists of studies for the construction of a 700 km long road linking the Kribi roadstead with Yokadouma (in the south-eastern part of Cameroon).

III. Justification: economic and financial analysis

1. Context and benefits

On the international level, the Kribi-Yokadouma road will be the beginning of a new east/west road into the centre of the African continent (Central African Republic) and westward via norther Congo. In Cameroon, the road will promote the accelerated development of the areas traversed and, in particular, the development of their considerable forestry resources. A feasibility study on part of the Kribi section in the neighbourhood of Djoun was carried out in 1978 by CTFT (Centre technique forestier et tropical, France) and BCEOM (Bureau central d'études pour les équipements d'Outre-Mer, France), showed a satisfactory internal rate of return.

2. Cost

The cost of the project is estimated at $27.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$27.00 million

Project No. ROP-06-003

CAMEROON: STUDY ON THE SANGMELIMA-CONGO BORDER ROAD (300 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (international road connecting with the future Tripoli-Windhoek Trans-Central African Highway)

Nature: Studies for the construction of a road from Sangmelima to the Congo border (300 km)

Location: Southern Cameroon

Cost: $3.50 million

External financing required: $3.50 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The objective of the project is to carry out studies for the construction of a section of a network of international roads connecting with the trans-African highways. The Sangmelima-Congo border road will make it possible to link the Lagos-Mombasa Trans-African Highway with the future Tripoli-Windhoek Trans-African Highway, through Cameroon and the Congo. The aim of the project is to establish a direct international link between Cameroon and the Congo, thus avoiding transit via Gabon.

2. Nature and constituent parts

The project consists of studies for the construction of a road from Sangmelima to the Congo border (300 km).

III. Justification; economic and financial analysis

1. Context and benefits

Since the Congo is submitting a further road project (Ouesso-Cameroon border), the two countries will then have an international link that will promote the development of their trade. It will be possible, through this road, to provide an overland link between northern Congo and the Cameroon port of Douala, thus avoiding the need for using the inland waterway Sangha-Oubangui-Zaire route. In Cameroon, the road will facilitate forestry development in the areas it will traverse.

2. Cost

The cost of the project is estimated at $3.50 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$3.50 million

Project No. ROP-06-004

CAMEROON: CONSTRUCTION OF THE NGAOUNDERE-CHAD BORDER ROAD (313 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (Douala-Central African Republic-Chad corridor)

Nature: Updating of the 1973 engineering study on the Ngaoundere-Chad border road and then construction of the road (313 km)

Location: Central Cameroon

Cost: $73.90 million

External financing required: $73.90 million

Duration: Three to four years

Desirable starting date: 1984

Project initiator: Ministry of Public Works and Equipment

Project management authority: Ministry of Public Works and Equipment

II. Description

1. Aim and objective

Engineering studies have been undertaken long ago on the existing road between Guidjiba and Chad border and should be updated for implementation of the project.

2. Nature and constituent parts

The project consists of updating the studies which were undertaken in 1973 on the Guidjiba-Chad border road by two Italian consulting firms, with financing from EDF and then to proceed with the construction work.

III. Justification; economic and financial analysis

1. Context and benefits

The Ngaoundere-Guidjiba section of the road is already asphalted. The proposed project will provide a direct all-weather road link with the southern region of Chad and provide access to the sea through Douala. This road will make it possible to transport goods bound for southern Chad without having to go by the longer route which passes through N'Djamena.

2. Cost

The cost of the project is estimated at $73.90 million.

IV. Status

The former studies have to be updated before the road can be constructed.

V. Financing

Local financing received or expected: Nil
External financing secured: Nil
External financing required: $73.90 million

Project No. ROP-06-005

CAMEROON: CONSTRUCTION OF THE YAOUNDE-MBALMAYO-EBOLOWA-AMBAM-GABON BORDER ROAD (286 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications road connecting with the trans-African highways)

Nature: Study and construction of a road Yaounde-Mbalmayo-Ebolowa-Ambam-Gabon border (286 km)

Location: Southern Cameroon, near Gabon

Cost: $85.00 million

External financing required: $59.50 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The objective of the project is to contribute to the construction of the road network connecting with the trans-African highways. The Yaounde-Mbalmayo-Ebolowa-Ambam-Gabon border road is on a route connecting the Lagos-Mombasa Trans-African Highway with the future Tripoli-Windhoek Trans-African Highway through Cameroon, Gabon and the Congo. The aim of the project is to establish a permanently good-quality road between Cameroon and Gabon.

2. Nature and constituent parts

The project consists of the construction of the road to the standard indicated by the preliminary studies.

III. Justification: economic and financial analysis

1. Context and benefits

The project is of international importance since it will connect Cameroon, Nigeria, Gabon and the Congo and provide a link between the Lagos-Mombasa Highway and the Tripoli-Windhoek Highway. Since Gabon is an importer of foodstuffs which can be provided by Cameroon, trade between the two countries will be stimulated as a result of reduction in road transport costs. In Cameroon, the road will help promote forestry in the southern part of the country.

2. Cost

The cost of the project is estimated at $85.00 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$25.50 million
External financing secured:	Nil
External financing required:	$59.50 million

Project No. ROP-06-006

CAMEROON: CONSTRUCTION OF THE AMBAM-EQUATORIAL GUINEA BORDER ROAD (30 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications
road link to the Lagos-Mombasa Trans-African Highway)

Nature: Construction of the Ambam-Equatorial Guinea border road (30 km)

Location: South-western Cameroon

Cost: $12.27 million

External financing required: $7.60 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of Public Works and Equipment

Project management authority: Ministry of Public Works and Equipment

II. Description

1. Aim and objective

The objective of the project is to establish an all-weather road designed in accordance with international standards between Cameroon and Equatorial Guinea.

2. Nature and constituent parts

The project consists in constructing two sections of road between Ambam and the Equatorial Guinea border (30 km).

III. Justification; economic and financial analysis

1. Context and benefits

There is an unpaved track between Ambam and the Equatorial Guinea border which is impassable during the rainy season. The main purpose of this project is to establish a direct all-weather link between Cameroon and Equatorial Guinea and to facilitate and promote the development of trade between the two countries.

In Cameroon itself, the road will promote forestry operations in the areas served.

2. Cost

The cost of the project is estimated at $12.27 million.

IV. Status

Studies have been completed and construction has to be carried out now.

V. Financing

Local financing received or expected:	$4.67 million
External financing secured:	Nil
External financing required:	$7.60 million

Project No. ROP-06-007

CAMEROON: STUDY AND START OF CONSTRUCTION OF THE YAOUNDE-BERTOUA-GAROUA-BOULAI ROAD (568 KM)

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (Douala-Central African Republic-Chad corridor)

Nature: Study and construction of the Yaounde-Bertoua-Garoua-Boulai road (568 km)

Location: East-central Cameroon

Cost: $26.30 million

External financing required: $26.30 million

Duration: Three to four years

Desirable starting date: 1984

Project initiator: Ministry of Public Works and Equipment

Project management authority: Ministry of Public Works and Equipment

II. Description

1. Aim and objective

The objective of the project is to improve road links between Yaounde and the east-central and northern regions of Cameroon and also to open up the Central African Republic by providing it with an access to the port of Douala.

2. Nature and constituent parts

The project consists in undertaking studies to be followed by the construction of a 568-km road between Yaounde and Garoua-Boulai via Bertoua.

III. Justification; economic and financial analysis

1. Context and benefits

At the international level, this road constitutes an important feeder to the Lagos-Mombasa Trans-African Highway and it will improve communications between Yaounde and Douala. The Yaounde-Douala section of the road is currently being improved by bitumen surfacing.

At the national level, the road will help improve communications with the relatively undeveloped northern and east-central regions.

2. Cost

The cost of the project is estimated at $26.30 million.

IV. Status

Studies are to be undertaken during the second phase of the Decade.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$26.30 million

Project No. ROP-06-008

CAMEROON: CONSTRUCTION OF THE BAMENDA-EKOK-MFUM-NIGERIA BORDER ROAD (187 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of the Lagos-Mombasa Trans-African Highway)

Nature: Construction of the Bamenda-Ekok-Mfum-Nigeria border road (187 km)

Location: Western Cameroon

Cost: $140.00 million

External financing required: $119.60 million

Duration: Three to four years

Desirable starting date: 1984

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The objective of the project is to contribute to the construction of the trans-African road network. The Bamenda-Ekok-Mfum-Nigeria border road is a section of the Lagos-Mombasa Trans-African Highway. The aim of the project is to establish a good quality road link between Cameroon and Nigeria.

2. Nature and constituent parts

The project consists of the construction of 187 km of road between Bamenda and the Nigerian border.

III. Justification; economic and financial analysis

1. Context and benefits

The construction of the road will make it possible to develop international relations, particularly between Cameroon and Nigeria; transport costs will be substantially reduced. In Cameroon, the road will facilitate east-west trade along the route of the Lagos-Mombasa Trans-African Highway and will also promote economic integration in the country.

2. Cost

The cost of the project is estimated at $140.00 million.

IV. Status

The feasibility study has already been carried out.

V. Financing

Local financing received or expected:	$19.40 million
External financing secured:	$1.00 million
External financing required:	$119.00 million

Project No. ROP-06-009

CAMEROON: STUDY ON THE FOUMBAN-TIBATI ROAD (316 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Engineering studies for the construction of the Foumban-Tibati road

Location: Central Cameroon

Cost: $2.00 million

External financing required: $2.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The project is designed to meet the objective of completing the trans-African highways network currently under construction. It related to a section of the Lagos Mombasa Trans-African Highway.

The project has a dual purpose: on the one hand to construct the missing link of the Trans-African Highway in Cameroon and, on the other, to connect west Cameroon with east Cameroon by securing the Ngaoundere-Douala link through Tibati, Banyo, Foumban and Bafang.

2. Nature and constituent parts

The proposed project comprises the engineering studies for the Tibati-Foumban road. The length of the road is 326 km.

III. Justification; economic and financial analysis

1. Context and benefits

The construction of the road will facilitate all-weather driving across Cameroon on the Lagos-Mombasa Trans-African Highway. It will also help to bring about a balanced development of the different areas of the country by linking the relatively underdeveloped north with the west and south-west of the country. Although running parallel to the Trans-Cameroonian, the Tibati-Foumban road project appears to be more complementary to the railway than in competition with it. The opening of the road will, in fact, ease the congestion on the railway which since the opening of the Belabo-Ngaoundere section, has seen an excessively sharp increase in the shipment of goods between north and south Cameroon.

2. Cost

The total cost of the project is estimated at $2.00 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$2.00 million

Project No. ROP-06-010

CAMEROON: STUDY ON THE MEIDOUGOU-GAROUA BOULAI ROAD (98 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of the Lagos-Mombasa Trans-African Highway)

Nature: Study for the construction of the Meidougou-Garoua Boulai road (98 km)

Location: East-central Cameroon

Cost: $0.70 million

External financing required: $0.70 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The objective is to carry out studies for the construction of the eastern section of the east-west Trans-African Highway up to the Central African Republic border, and the improvement of the Cameroon section of the Trans-African Highway as well as the section of the main road which goes to the north from Yaounde to Ngaoundére through Bertoua.

2. Nature and constituent parts

The project comprises engineering studies on the 98 km Meid ugou-Garou.

III. Justification; economic and financial analysis

1. Context and benefits

The studies will lead to the completion of the Lagos-Mombasa Trans-African Highway to improve international links between the areas on this east-west highway. The Meidougou-Garoua-Boulai road is a small section of this highway.

2. Cost

The cost of the project is estimated at $0.70 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.70 million

Project No. ROP-06-011

CAMEROON: CONSTRUCTION OF THE YAOUNDE-BAFOUSSAM ROAD (BAFIA-BAFOUSSAM SECTION (268 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project

Nature: Construction of a bitumen surfaced road

Location: Centre-western Cameroon

Cost: $90.00 million

External financing required: $90.00 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The main objective of the project is to improve the 268 km Yaounde-Bafoussam road.

2. Nature and constituent parts

The project relates to upgrading the Yaounde-Bafoussam road in accordance with international standards to meet current and potential traffic.

III. Justification; economic and financial analysis

1. Context and benefits

The Yaounde-Bafoussam road is a major feeder of the Lagos-Mombasa Trans-African Highway. The construction of this road will help boost agricultural development in the area served by the road and it will also improve communications between the areas in the western part of the country.

2. Cost

The cost of the project is estimated at $90.00 million.

IV. Status

The studies have been completed.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$90.00 million

Project No. ROP-06-012

CAMEROON: CONSTRUCTION OF A BRIDGE OVER THE NOUN RIVER

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project

Nature: Construction of a bridge over the Noun river

Location: Centre-western Cameroon

Cost: $8.53 million

External financing required: $5.97 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The objective of the project is to construct a bridge over the Noun river, to provide an all-weather link between Bafoussam and Foumban.

2. Nature and constituent parts

The project consists of the construction over the Noun river, of a reinforced concrete bridge designed in accordance with geometric standards of international road structures.

III. Justification; economic and financial analysis

1. Context and benefits

The construction of the bridge over the river will make it possible for users to travel directly between Bafoussam and Foumban without having to break up their trip, and the distance between the two places will in fact be reduced by a few kilometres.

2. Cost

The cost of the project is estimated at $8.53 million.

IV. Status

The project is under way; studies have already been undertaken and the Government's financial contribution has already been provided.

V. Financing

Local financing received or expected:	$2.56 million
External financing secured:	Nil
External financing required:	$5.97 million

Project No. ROP-06-013

CAMEROON: REHABILITATION OF THE BAFOUSSAM-NOUN BRIDGE-FOUMBAN ROAD (70 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project

Nature: Rehabilitation of the road and the Noun bridge

Location: Centre-western Cameroon

Cost: $9.90 million

External financing required: Nil

Duration: Two years

Desirable starting date: 1983

Project initiator: Ministry of Works and Equipment

Project management authority: Ministry of Works and Equipment

II. Description

1. Aim and objective

The Bafoussam-Foumban road which carries very heavy traffic is in a state of disrepair due to excess axle-weight. The objective of this project is to rehabilitate the road by resurfacing it to increase its bearing capacity.

2. Nature and constituent parts

The project consists of re-asphalting of the road surface which has deteriorated as a result of very heavy traffic.

III. Justification: economic and financial analysis

1. Context and benefits

The project which is aimed at rehabilitating the road linking two important centres in Cameroon, Bafoussam and Foumban, will be very advantageous to users and will considerably cut down travel time. The link will also improve the supply of food to these two centres.

2. Cost

The cost of the project is estimated at $9.90 million.

IV. Status

The project is in progress.

V. Financing

Local financing received or expected;	Nil
External financing secured:	$9.90 million
External financing required:	Nil

Project No. ROP-07-001

CAPE VERDE: EMERGENCY STAFF TRAINING PROGRAMME ON ROAD TRANSPORT

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Training of intermediate staff, technicians and skilled labour

Location: Praia and the entire country

Cost: $0.16 million

External financing required: $0.10 million

Duration: One year

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Highways Department, Ministry of Housing and Public Works

II. Description

1. Aim and objective

The objective of the project is to place the State in readiness for the demand for qualified personnel that will be generated by the implementation of the First National Development Plan.

2. Nature and constituent parts

The project will consist of training and intensive courses for technicians and intermediate staff, training courses for skilled workers, especially by supervisors and trained technicians and as well as the organization of a coherent series of local training courses using the experience acquired during the execution of the programme for the improvement of methods used in labour-intensive projects.

III. Justification: economic and financial analysis

1. Context and benefits

The proper implementation of this project is one of the determining factors for the implementation of the National Plan.

2. Cost

The cost of this project is estimated at $0.16 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$0.06 million
External financing secured:	Nil
External financing required:	$0.10 million

Project No. ROP-07-002

CAPE VERDE: ESTABLISHMENT OF A NATIONAL BUREAU OF ENGINEERING STUDIES

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: To study and promote local capability in engineering studies to determine the scale and structure of a bureau of engineering studies

Location: Praia

Cost: $1.60 million

External financing required: $1.60 million

Duration: Three years

Desirable starting date: 1983

Project initiator: The Government

Project management authority: Highways Department, Ministry of Housing and Public Works

II. Description

1. Aim and objective

The objective is to rationalize production methods and increase the productive capacity of the sector.

2. Nature and constituent parts

The project includes the creation of a structure capable of collecting and transferring the experience acquired in construction projects by a number of building and public works engineers. In order to do this, a National Bureau of Engineering Studies will have to be set up in stages.

Technical assistance will be needed from the outset (an engineer, two architects, one soils engineer, one programmer and a specialist in project management); materials testing laboratory is also planned.

III. Justification; economic and financial analysis

1. Context and benefits

The benefits from this project will be felt in the entire sector and in the other departments of the Ministry; they will also be felt in the development of productive capacity, in the substantial savings made in foreign exchange from the purchase of materials and in the improvement in the quality of work.

2. Cost

The cost of the project is estimated at $1.60 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.60 million

Project No. ROP-07-003

CAPE VERDE: ORGANIZATION OF ROAD MAINTENANCE CREWS

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Organization of road maintenance crews

Location: Throughout the country

Cost: $0.62 million

External financing required: $0.62 million

Duration: Four years

Desirable starting date: 1983

Project initiator: The Government

Project management authority: Highways Department, Ministry of Housing and Public Works

II. Description

1. Aim and objective

The objective is to ensure the maintenance of all existing and future roads.

2. Nature and constituent parts

The project will include the supply of the equipment needed (pick-ups, trucks, motor cycles, etc.), of materials for road repair as well as the organization of three teams at Santo Antao, Sao Tiago and Fogo and five smaller crews spread over the other islands.

III. Justification: economic and financial analysis

1. Context and benefits

This project will make it possible to maintain the entire national road infrastructure at a very reduced cost and with limited facilities, thanks to the road construction techniques currently being employed.

2. Cost

The estimated cost of the project is $0.62 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.62 million

Project No. ROP-07-004

CAPE VERDE: INSTALLATION OF ROAD SIGNS AND SIGNALS

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Supply of road signs and signals

Location: The entire national road network

Cost: $0.12 million

External financing required: $0.12 million

Duration: One year

Desirable starting date: 1983

Project initiator: The Government

Project management authority: Highways Department, Ministry of Housing and Public Works

II. Description

1. Aim and objective

The objective is to improve road safety on the entire national network.

2. Nature and constituent parts

The project will include the supply of all road signs listed by the services of the Highways Department.

III. Justification: economic and financial analysis

1. Context and benefits

This project will help to improve road safety, cut down on transportation costs and reduce the number of accidents.

2. Cost

The estimated cost of the project is $0.12 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.12 million

Project No. ROP-07-005

CAPE VERDE: CONSTRUCTION OF ROADS ON SANTO ANTAO AND SAO TIAGO ISLANDS (76 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Construction of 76 km of roads on both islands

Location: Islands of Santo Antao and Sao Tiago

Cost: $13.50 million

External financing required: $5.30 million

Duration: Four years

Desirable starting date: 1984

Project initiator: Government of Cape Verde, First National Development Plan

Project management authority: Highways Department, Ministry of Housing and Public Works

II. Description

1. Aim and objective

The objective is to open up agricultural areas, main secondary centres and link them with different ports and airports while reducing transport costs which are now exorbitant and creating employment for 4,500 people in areas affected by drought using labour intensive methods.

2. Nature and constituent parts

On Santo Antao islands, the project will include the construction of the 4.5 km Ra Crande-Ponta do Sol road, the repair of the Ra Grande-Ponta do Sol road (4.5 km), the construction and strengthening of the Ponta Sol-Ra Cruz road (26.7 km), the construction of the Boca de Ambas Ribeiras-Garga road (11 km), the strengthening of the Ponte de Sul-Tarrafal de Monte Trigo road (15 km), the construction of the Desvio Ra Da Cruz-Alto Nira road (5 km) and the procurement of the necessary equipment.

On Sao Tiago islands, the project will include the completion of the Serra Malageta road (2 km), the construction of Volta del Monte-Ra Barea and the Cida de Veltro-S. Jocco roads (5 km and 4 km respectively), the repair of other roads, and the procurement of the necessary equipment.

These roads will be paved with a surface width of 5 m and a roadway of 7 m.

III. Justification: economic and financial analysis

1. Context and benefits

These projects will open up areas with 35,000 inhabitants and help develop an irrigated scheme of 400 ha.

Some 4,500 jobs will be created. The construction of these roads will reduce transport costs and in some cases the availability of transport will be an indispensable support for productive activities.

2. Cost

The cost of this project is estimated at $13.50 million.

V. Financing

Local financing received or expected:	Nil
External financing secured:	$8.00 million
External financing required:	$5.30 million

Project No. ROP-07-006

CAPE VERDE: CONSTRUCTION OF ROADS ON BOA VISTA AND MAIO ISLANDS

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Construction of roads on Boa Vista and Maio islands

Location: Boa Vista and Maio islands

Cost: $4.56 million

External financing required: $2.66 million

Duration: Two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Highways Department, Ministry of Housing and Public Works

II. Description

1. Aim and objective

The objective is to build a road network on these islands where road construction has until now been extremely limited.

2. Nature and constituent parts

The project includes studies followed by the construction of a road network in Cape Verde using entirely mechanized processes for the first time in Cape Verde. The foundation layer will be improved and the top layer of double surface bitumen constructed.

The preliminary studies are being financed by UNSO. Estimates based on traditional construction techniques have been temporarily maintained.

III. Justification: economic and financial analysis

1. Context and benefits

These roads will bring out the people from isolation and help improve agriculture. Preliminary studies have concluded that there will be a savings in time (quicker completion of the project) and in the cost per kilometre.

2. Cost

The cost of this project is estimated at $4.56 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	$1.90 million
External financing required:	$2.66 million

Project No. ROP-07-007

CAPE VERDE: EQUIPMENT FOR THE CONSTRUCTION OF ROADS ON SAO NICOLAU ISLAND

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Purchase of the equipment necessary for the construction work

Location: Sao Nicolau Island

Cost: $1.00 million

External financing required: $1.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Highways Department, Ministry of Housing and Public Works

II. Description

1. Aim and objective

The objective is to build roads on Sao Nicolau island.

2. Nature and constituent parts

The project includes the construction of the Tarrafal-Ra Brava-Ra Prata and Mono Bras-Junealinko roads. Labour-intensive techniques will be used to build these paved roads, 5m wide with a road bed of 7 m.

III. Justification: economic and financial analysis

1. Context and benefits

The roads will help to link population centres to the existing road network and raise the value of agricultural products on the island.

2. Cost

The cost of the project is estimated at $1.00 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.00 million

Project No. ROP-07-008

CAPE VERDE: EQUIPMENT FOR THE CONSTRUCTION OF ROADS ON SAO VICENTE ISLAND

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Purchase of the equipment necessary and construction of the roads

Location: Sao Vicente island

Cost: $1.30 million

External financing required: $1.30 million

Duration: One year

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Highways Department, Ministry of Housing and Public Works

II. Description

1. Aim and objective

The objective is to continue the efforts to link up population centres to the existing roads network so as to enhance the value of agricultural products on the island of Sao Vicente.

2. Nature and constituent parts

The project includes the purchase of the equipment needed for these works and the implementation of road works.

III. Justification: economic and financial analysis

1. Context and benefits

The implementation of this project will raise the value of agricultural products in the island of Sao Vicente. The equipment bought could be used for the improvement and paving of various secondary airports on other islands.

2. Cost

The cost of the project is estimated at $1.30 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.30 million

Project No. ROP-08-001

CENTRAL AFRICAN REPUBLIC: STUDY ON THE BOSSEMBELE-GAROUA-BOULAI ROAD (440 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of the Lagos-Mombasa Trans-African Highway) for a disadvantaged country

Nature: Studies on the construction of a road to meet international geometrical characteristics

Location: South-west Central African Republic

Cost: $4.00 million

External financing required: $4.00 million

Duration: Two to three years

Desirable starting date: 1987

Project initiator: Ministry of Transport and Civil Aviation

Project management authority: Ministry of Public Works and Town Planning

Best copy available

II. Description

1. Aim and objective

The 440-km Bossembele-Garoua-Boulai road serves the entire north-western part of the Central African Republic. This area is very rich and densely populated. The road will provide the Central African Republic with the only link to the sea through Cameroon. The aim is to carry out studies to make this road all-seasonal. The Central African Republic will then be linked to its neighbours - Cameroon (Douala port) and Nigeria.

2. Nature and constituent parts

For the moment, progressive operations will be carried out to bring the road to modern standards with international geometric characteristics. In order to do this, numerous adjustments will have to be made to the layout - the formation level will have to be marked out again and the profile improved throughout the entire stretch of the road. Most of the bridges will have to be replaced, along with drainage structures.

III. Justification; economic and financial analysis

1. Context and benefits

The Bossembele-Garoua-Boulai section is part of the Lagos-Mombasa Trans-African Highway in the Central African Republic. A 1975 study by BCEOM concluded that the road should be progressively improved until it is finally asphalted.

The Bossembele-Garoua-Boulai road will provide a good-quality outlet by land. In addition to this, it will ease the development of the areas through which it passes. These areas produce coffee, cotton, fruits, vegetables and livestock. The Bouar area, in particular, practises horticulture for export.

2. Cost

The cost of the project is estimated at $4.00 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$4.00 million

Project No. ROP-08-002

CENTRAL AFRICAN REPUBLIC: STUDY ON THE SIBUT-BAMBARI-BANGASSOU ROAD (560 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of the Lagos-Mombasa Trans-African Highway) for a disadvantaged country

Nature: Study on the reconstruction of existing road including bitumen surfacing

Location: South-eastern Central African Republic

Cost: $3.00 million

External financing required: $3.00 million

Duration: Two to three years

Desirable starting date: 1984

Project initiator: Ministry of Public Works and Town Planning

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to contribute to the construction of the Lagos-Mombasa Trans-African Highway and to assist in providing access to the sea for the Central African Republic. It will also give the Central African Republic an all-weather link to Zaire and East African countries.

2. Nature and constituent parts

The project consists of studies for the reconstruction of the Sibut-Bangassou road (560 km).

III. Justification: economic and financial analysis

1. Context and benefits

In addition to its role as a link between the African countries crossed by the Lagos-Mombasa Trans-African Highway, this road will facilitate connections between eastern Central African Republic and the capital, Bangui. The transport of regional products, particularly cotton and coffee, will be facilitated and economies in transport costs will be achieved.

2. Cost

The cost of the project is estimated at $3.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$3.00 million

Project No. ROP-08-003

CENTRAL AFRICAN REPUBLIC: REPAIR OF BANGUI-MBAIKI ROAD (104 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Repair of road linking Bangui to Mbaiki, a major centre in the south of the country

Location: South-western part of the Central African Republic

Cost: $8.60 million

External financing required: $8.60 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of Transport and Civil Aviation

Project management authority: Ministry of Public Works and Town Planning

II. Description

1. Aim and objective

The Bangui-Mbaiki road is a bitumen-surfaced road built in 1972. It is now damaged because of heavy traffic and needs urgent repairs. This road is a major route linking Bangui to the south-western region of the country. The aim of the project is to strengthen it over a distance of 104 km.

2. Nature and constituent parts

The project consists of repairing the road by putting a layer of wear all over its length and by closing potholes to enable the safe flow of traffic.

III. Justification; economic and financial analysis

1. Context and benefits

The Bangui-Mbaiki road runs through a major forestry area (with saw-milling industries) and a major agricultural zone. It serves as access road to the ports of Zinga and Mongoumba, useful during low tide periods of the Oubangui river when ferries can no longer reach Bangui with full load. The technical and economic study carried out by BCEOM in 1981 concluded that the project should be implemented.

2. Cost

The cost of the project is estimated at $8.60 million.

IV. Status

No information is available on the project status.

V. Financing

Locan financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$8.60 million

Project No. ROP-08-004

CENTRAL AFRICAN REPUBLIC: IMPROVEMENT OF THE BOSSEMBELE-BOSSANGOA-BEDAOYO ROAD

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of the Lagos-Mombasa Trans-African Highway) for a disadvantaged country

Nature: Improvement of the road to all-weather standard

Location: Western region of the Central African Republic

Cost: $22.52 million

External financing required: $22.52 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Transport and Civil Aviation

Project management authority: Ministry of Public Works and Town Planning

II. Description

1. Aim and objective

The objective is to improve the Bossembélé-Bossangoa-Bedaoyo earth road, which contributes to the opening up of southern Chad. Agricultural and industrial products such as cotton are transported through this road to Bangui from where they are transported through the trans-Equatorial route to Pointe Noire.

2. Nature and constituent parts

The project consists of upgrading the road to all-weather standard. The projected road will have a 6m pavement, 0.5m large verges on both sides, and a 15 to 20 cm thick surface.

There are also plans to rehabilitate the drainage system and consolidate existing structures.

III. Justification; economic and financial analysis

1. Context and benefits

The road has neither been repaired nor maintained and travel on it is difficult. It runs through a major agricultural area (cotton, food crops) and constitutes a route for opening up southern Chad. It is also a second feeder road of the Lagos-Mombasa Trans-African Highway in the territory of the Central African Republic and concerns a reasonably dense population (300,000 inhabitants).

2. Cost

The cost of upgrading the road is estimated at $22.52 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$22.52 million

Chad and the Central African Republic made a joint request for financing to the EDF.

Project No. ROP-08-005

CENTRAL AFRICAN REPUBLIC: STUDY ON THE MBAIKI-CARNOT ROAD (324 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Study on upgrading the road to all-weather standard

Location: South-western part of the country

Cost: $1.50 million

External financing required: $1.50 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Transport and Civil Aviation

Project management authority: Ministry of Public Works and Town Planning

II. Description

1. Aim and objective

The objective is to carry out studies to upgrade the Mbaiki-Carnot road (324 km) to provide an access road to the south-western part of the country which is very rich in agricultural products, mainly coffee and tobacco and forest products.

2. Nature and constituent parts

The project consists at studies for the construction of a road with a 6m wide surface and with 0.5 m verges on both sides over a distance of 324 km. The 15 to 20 cm thick surface will be of selected materials. The existing road is an earth road. The work will also involve the rehabilitation of drainage structures and existing construction works.

III. Justification: economic and financial analysis

1. Context and benefits

The studies will lead eventually to the construction of this road to link up major forestry and agricultural centres. It will provide an access road to the western region of the country thereby providing means for the evacuation of food crops to the Bangui consumer centre. This section will further encourage trade between the Central African Republic and the Congo by draining products from the south-western region of the Central African Republic towards the feeder road of the Trans-African Highway linking the two countries and retained as a priority for the country's modernization.

2. Cost

The cost of the project is estimated at $1.50 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.50 million

Project No. ROP-08-006

CENTRAL AFRICAN REPUBLIC: STUDY ON THE SIBUT-SIDO KAGA-BANDORO-SIDO-CHAD BORDER ROAD (324 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (feeder road to the Lagos-Mombasa Trans-African Highway) for a disadvantaged country

Nature: Studies for the upgrading of the road to all-weather standard

Location: Central route of the Central African Republic

Cost: $2.00 million

External financing required: $2.00 million

Duration: Two years

Desirable starting date: 1985

Project initiator: Ministry of Transport and Civil Aviation

Project management authority: Ministry of Public Works and Town Planning

II. Description

1. Aim and objective

The objective is to carry out studies for the improvement of the earth road comprising several sections in very poor condition and linking Sibut, a town in the Central African Republic to the Chad border. via Sido.

2. Nature and constituent parts

The project consists of studies for the improvement of the existing earth road. This feeder road may be built in two or three sections so as to cut down the duration of work. The projected road will be 6 m wide and will have 0.5 m verges on both sides. The surface will be 15 to 20 cm thick and will be built with selected materials. The work will also probably involve the rehabilitation of the drainage system and the consolidation of existing construction works.

III. Justification: economic and financial analysis

1. Context and benefits

The traffic recorded by the study carried out in 1980 clearly shows that this road is of great priority for the Central African Republic and Chad. This is mainly due to the economic potential of the region through which the road passes and especially to cotton and mineral production. The Sibut-Sido section is the route most used in Chad to travel to Bangui. This section will serve as the main feeder road to the Tripoli-Windhoek Highway and Chad will be able to transport its oil products which are not far from the Central African Republic border.

2. Cost

The cost of the project is estimated at $2.00 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$2.00 million

Project No. ROP-09-001

CHAD: REHABILITATION OF THE GUELENDENG-SARH ROAD (409 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Rehabilitation of a road presently in extremely bad condition and impassable

Location: South-western Chad

Cost: $5.50 million

External financing required: $5.50 million

Duration: Two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Public Works, and Transport
Mines and Geology

II. Description

1. Aim and objective

This road connects Sarh, one of the economic centres of Chad, to the capital. A traffic count undertaken in March 1978 recorded the movement of 28-36 vehicles per day and a weight of 160 tons per day, depending on the survey point. The road, which at that time was not properly maintained, was barely passable and one would hope that better road conditions could have attracted traffic from Cameroon (availability of petrol, for example) and this could have generated even more traffic. At the moment, the road is in extremely poor condition.

2. Nature and constituent parts

The project comprises the repair of the laterite roadway, the re-metalling and the reprofiling, the repair of substructures and support structures as well as the cleaning out of the ditches.

III. Justification; economic and financial analysis

1. Context and benefits

This project is very important for the transportation of products between Sarh and N'Djamena at economically acceptable transport costs. These products are mainly sugar and cloth manufactured by SONASUT and STT respectively. Besides being a means of opening up Chad in the direction of the Congo River, this road and its extension towards Sido will also open up the country onto the Lagos-Mombasa Highway.

2. Cost

The cost of the project is estimated at $5.50 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$5.50 million

Project No. ROP-09-002

CHAD: REHABILITATION OF THE BONGOR-LAI ROAD (200 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Rehabilitation of a road which has become impassable

Location: South-western Chad

Cost: $2.30 million

External financing required: $2.30 million

Duration: Two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Public Works, Transport and Mines and Geology

II. Description

1. Aim and objective

While waiting for the new road to be opened sometime before 1987, it is necessary to summarily rehabilitate the present road which is almost impassable, because it is the shortest route between N'Djamena and the Mayo-Keblai, Lai and Doba agricultural areas. It is specially planned to rapidly put back into production the Lai and Doba rice factories which are mainly for supplying the capital with food.

The existing road gets inundated by floods from the Logone during the rainy season. The road could be passable during the other months, if it were maintained regularly when the waters recede, but this has not been done for several years.

2. Nature and constituent parts

The project consists of summary remetalling of the road, repairs of bad sections and cleaning out the ditches.

III. Justification; economic and financial analysis

1. Context and benefits

The project, like most other emergency projects of its kind in Chad, is indispensable for the economic recovery of the areas it serves, particularly the economic recovery of the Lai and Doba rice growing areas which supply N'Djamena with food.

2. Cost

The cost is estimated at $2.30 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$2.30 million

Project No. ROP-09-003

CHAD: IMPROVEMENT OF THE MASSAGUET-MASSAKORY-MAO-BOL ROAD

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: In two stages: summary rehabilitation and improvements

Location: Western Chad

Cost: $10.00 million

External financing required: $10.00 million

Duration: Four years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Public Works, and Transport
Mines and Geology

II. Description

1. Aim and objective

The objective is to link the Chadian roads network to the Trans-Saharan Highway by a feeder road and to open up the Kanem area.

The linkage with the Trans-Saharan Highway will make it possible to develop trade between the countries through which the road passes; the development of Chad will also be enhanced by the complementarity of these countries.

2. Nature and constituent parts

The road includes the section linking Massaguet to Mao via Massakory (154 km), the Mao-Bol section (114 km) and the section between Mao and the Niger border (232 km).

It is preferable to make investments in two phases:

Phase 1

Opening up of the Kanem area: 268 km

Phase 2

Linkage with the Trans-Saharan Highway: 232 km

III. Justification: economic and financial analysis

1. Context and benefits

The Bol area has potential for development in the future; this will come with the exploration of oil deposits there and the empolderization of the fringes of Lake Chad where areas for market gardening will be developed.

At the moment, the region is served by the Massaguet-Massakory road which is in bad condition; 37 vehicles carrying 170 tonnes passed each day during a 1978 vehicle count. Some desert tracks are used, but these are often covered by sand, making them impassable.

2. Cost

The cost of the project is estimated at $10.00 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required	$10.00 million

Project No. ROP-09-004

CHAD: STUDY ON THE MOUNDOU-LERE CAMEROON BORDER ROAD (116 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Studies for the construction of a modern asphalted road

Location: South-western Chad

Cost: $2.00 million

External financing required: $2.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Public Works, Transport, Mines and Geology

II. Description

1. Aim and objective

The Moundou-Léré-Cameroon border road is the Chad section of the Moundou-Guidjiba main road which links the southern provinces of Chad to the asphalted Cameroonian road linking Garoua, Ngoundére and Douala. This road is 116 km long.

A 1978 vehicle count on the road recorded between 54 and 41 vehicles per day between Moundou and Kélo and between 38 and 24 vehicles per day from Kélo to the Cameroonian border. The volume of goods transported was about 300 tonnes per day.

A survey conducted at Léré, near the border estimated the tonnage of goods transported from Cameroon to Moundou at 50,000 tonnes and that from Moundou to Cameroon at 47,000 tonnes.

The modernization of this road will help a great deal in improving trade between the southern provinces of Chad and Cameroon. Transportation costs will be reduced considerably and this should widen the profit margin after the sale of cotton for export.

The cost of imported goods in the area (for example, Cameroonian unbleached textiles for the STT) should also drop. In the long term, this road will become a feeder road to the Lagos-Mombasa Trans-African Highway.

2. Nature and constituent parts

The projected road will be 116 km long, with a road bed 9 m wide and a roadway 6 m wide. It will also require five major structures and 13 secondary structures.

III. Justification: economic and financial analysis

1. Context and benefits

This road will improve trade between Cameroon and Chad, which is estimated to balance at 50,000 tonnes per year for both countries.

It should also make it possible to re-establish links between the south-western part of Chad and Cameroon. The value of products from the areas it serves will be enhanced.

2. Cost

The estimated cost of the project is $2.00 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$2.00 million

Project No. ROP-09-005

CHAD: STUDY ON THE SARH-ABECHE ROAD (611 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Studies for the rehabilitation of Sarh-Abeche road

Location: South-eastern and centre-east Chad

Cost: $2.50 million

External financing required: $2.50 million

Duration: Three to four years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Public Works, Transport, Mines and Geology

II. Description

1. Aim and objective

The objective is to carry out studies for the rehabilitation of the Sarh-Abèche road, one side of the road N'Djamena-Sarh-Abèche-N'Djamena triangle which links the three regional capitals of Chad.

The ACF assumed responsibility for the summary improvement of the road link between N'Djamena and Abèchè via Mongo and Mangalme. Thus the first phase only concerns the 407 km stretch between Sarh and Abèchè, which passes through Hellibongo, Karo and Aboudeia.

In 1978 the vehicle counts showed three vehicles transporting three tonnes of foods per day between Hellibongo and Aboudeia. This is more of a track than a road, and for many years the normal speed has been about 25 km per hour.

2. Nature and constituent parts

The project consists of studies to be carried out on the two phases of the rehabilitation works.

The first phase will include summary remetalling, improvements of difficult sections, and laying of drainage pipes in flooded places.

The second phase will include the rejection of 611 km long road with a roadbed 9 m wide, a major bridge on the Chari and six small others, as well as the construction of passages with metal drainage pipes and box culverts (559 in total, and 62 in low-lying areas).

III. Justification; economic and financial analysis

1. Context and benefits

Trade between Sarh and Abéché is still undeveloped, the absence of a good link being one of the reasons. However, the road passes through the Salamat, an area rich in millet, cotton and dried fish. The existence of motorable roads would ease the transportation of these products to Sarh and Abeche and later on encourage the development of these products. The primary interest in this road is political, and has to do with the opening up of eastern Chad to the Central African Republic and Cameroon, and to the more economically developed areas of the country.

Expected payoffs from these investments are the strengthening of national unity though the movement of people and products, and, in the medium term, a better re-distribution of the fruits of economic development from the south to the eastern and northern regions of the country. The complementary of these regions will thereby be enhanced.

2. Cost

The total cost of the project is estimated at $2.50 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$2.50 million

Project No. ROP-10-001

CCMCROS: STUDY, CONSTRUCTION AND MAINTENANCE OF ROADS ON GRANDE COMORE, ANJOUAN AND MOHELI ISLANDS (113 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Study, construction and maintenance of roads

Location: Within the three islands

Cost: $27.70 million

External financing required: $7.70 million

Duration: Two to three years

Desirable starting date: 1984

Project initiator: Ministry of Equipment

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective is to carry out studies and to construct some roads as well as to maintain the existing ones on the three islands.

2. Nature and constituent parts

The project consists of the study of 70 km in Grande Comore and Moheli islands, and construction of 43 km in Anjouan and Moheli islands. It also includes the study of the second road maintenance programme in Grande Comore island.

III. Justification; economic and financial analysis

1. Context and benefits

The project is designed to keep the existing road system in a good condition. The improvement of roads will facilitate the development of tourism in the country.

The construction projects will allow access to the areas hitherto closed due to lack of roads.

The improvement of road transport in general will facilitate the economic growth of the country.

2. Cost

The cost of the project is estimated at $27.70 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected: $7.90 million
External financing secured: $12.10 million
External financing required: $7.70 million

Project No. ROP-11-001

CONGO: CONSTRUCTION OF THE OWANDO-BOMASSA SECTION OF THE BRAZZAVILLE-BOMBASSA HIGHWAY (403 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of the proposed Tripoli-Windhoek Trans-Central African Highway)

Nature: Studies followed by the construction of the Owando-Bomassa section of the Brazzaville-Bomassa highway.

Location: Northern Congo

Cost: $161.00 million

External financing required: $101.00 million

Duration: Two to three years

Desirable starting date: 1984

Project initiator: Ministry of Transport and Civil Aviation

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the projects is to contribute to the construction of the proposed Tripoli-Windhoek Trans-Central African Highway; the project will also link the Congo with the Lagos-Mombasa Trans-Central African Highway.

2. Nature and constituent parts

The project consists of studies followed by the construction of a bitumen road from Owando to Bambassa at the Central African Republic border. The 195-km Brazzaville-Lefini section has already been bitumen surfaced and therefore 403-km remains to be done.

III. Justification; economic and financial analysis

1. Context and benefits

Being both a section of the future Tripoli-Windhoek Trans-Central African Highway and a link road from the Congo to the Lagos-Mombasa Trans-African Highway, this road will give access to the sea both for north-eastern Congo, which has considerable forestry and agricultural potential, and the Central African Republic.

2. Cost

The cost of the project is estimated at $161.00 million.

IV. Status

No overall feasibility study exists; engineering studies have been made by the Public Works Department for the Etsonali-N'go (52 km), Olombo-Obouya (57 km) and Owando-Makoua (68 km) sections.

V. Financing

Local financing received or expected:	$60.00 million
External financing secured:	Nil
External financing required:	$101.00 million

Project No. ROP-11-002

CONGO: STUDY ON THE KETTA-CAMEROON BORDER ROAD (280 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with regional implications (feeder to the Tripoli-Windhoek Trans-Central African Highway)

Nature: Studies for the construction of a bitumen-surfaced road from Ouesso to the Cameroon border (near Djoum-Sangmélima)

Location: Northern Congo

Cost: $2.60 million

External financing required: $2.60 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Transport and Civil Aviation

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to carry out studies for the improvement of road links between Ouesso and the north-eastern part of the country and for the strengthening of relations between Cameroon and the Congo.

2. Nature and constituent parts

The project relates to undertaking studies for the construction of an all-weather road between Ketta and Sembé with two branches, one linking Sembé-Souaké to the Cameroon border and the other one between Sembé and Madjingo.

III. Justification; economic and financial analysis

1. Context and benefits

This project will improve the road network in the north-eastern part of the country. The road will connect Ouesso, the regional centre, to Sembé and Souaké, the subregional centres and promote trade between Cameroon and the Congo.

2. Cost

The cost of the project is estimated at $2.60 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing received:	Nil
External financing required:	$2.60 million

Project No. ROP-11-003

CONGO: STUDY ON A ROAD BETWEEN KINKALA, LOUBOMO AND THE GABON BORDER (546 km)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with regional implications (feeder to the Lagos-Mombasa Trans-African Highway)

Nature: Study for the construction of a bitumen-surfaced road between Kinkala, Loubomo and the Gabon border.

Location: South-western Congo

Cost: $5.00 million

External financing required: $5.00 million

Duration: Two to three years

Desirable starting date: 1984

Project initiator: Ministry of Transport and Civil Aviation

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to carry out studies to improve communication between Brazzaville and Pointe Noire, the main port of the Congo and to establish a road link between Brazzaville and Libreville, the capital of Gabon.

2. Nature and constituent parts

The project consists in undertaking studies for the construction of a 7.0 m wide bitumen-surfaced road between Kinkala and the Gabon border. The road will be 546 km long.

III. Justification: economic and financial analysis

1. Context and benefits

The main advantage of this project will be improvement of communication between Brazzaville and Pointe Noire. This is the main road of the country and it plays a vital role in the national economy since it serves the most developed areas of the country.

2. Cost

The cost of the project is estimated at $5.00 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$5.00 million

Project No. ROP-12-001

DJIBOUTI: REPAIR OF THE DJIBOUTI-ETHIOPIAN BORDER ROAD WITH VARIOUS LINK ROADS TO ARTA, WRAH, ALI SABIEH, DIKHIL (250 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (feeder of the Cairo Gaborone Trans-East African Highway) for a disadvantaged country

Nature: Improvement of the existing road

Location: Southern Djibouti

Cost: $21.57 million

External financing required: $21 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Transport

Project management authority: Ministry of Public Works

II. Description

1. Aim and objective

The objective is to rehabilitate the existing road so that it can sustain the growing traffic.

2. Nature and constituent parts

The project consists of the rehabilitation of about 250 km of roads which is part of the [illegible] route connecting Djibouti to Arta, Weah, Ali Sabieh and Dikhil.

III. Justification: economic and financial analysis

1. Context and benefits

This road connects Djibouti and Ethiopia and thereby acts as a feeder to Trans-East African Highway. It will ease the traffic problem that is growing between Djibouti and Ethiopia on the border. It is an internal axis of high priority for Djibouti.

2. Cost

The cost of the project is estimated at $21.57 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$0.06 million
External financing secured:	$0.51 million
External financing required:	$21 million

Project No. ROP-12-002

DJIBOUTI: STUDY AND CONSTRUCTION OF THE TADJOURA-OBOCK ROAD (75 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Studies leading to the construction of an existing road

Location: Northern Djibouti

Cost: $18.00 million

External financing required: $18.00 million

Duration: Two to three years

Desirable starting date: 1984

Project initiator: Ministry of Public Works

Project management authority: Ministry of Public Works

II. Description

1. Aim and objective

The aim is to construct a road from Tadjoura to Obock to improve the national road network.

2. Nature and constituent parts

This project includes the construction of a high standard road, 75 km long between Tadjoura and Obock.

III. Justification; economic and financial analysis

1. Context and benefits

The road connects the northern district with Tadjoura and Djibouti and increases the momentum of economic development which has already been started.

2. Cost

The cost of the project is estimated at $18.74 million.

IV. Status

The study which is in progress is financed $0.65 million by the African Development Fund (ADF) and $0.85 million by the Djibouti Government.

V. Financing

Local financing received or expected:	$0.09 million
External financing secured:	$0.65 million
External financing required:	$18 million

Project No. ROP-12-003

DJIBOUTI: STUDY ON THE TADJOURA-RANDA-DORRA ROAD

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Studies for the construction of a road linking Tadjoura and Dorra (50 km)

Location: Central Djibouti

Cost: $0.60 million

External financing required: Nil

Duration: One to two years

Desirable starting date: 1984

Project initiator: Ministry of Public Works

Project management authority: Ministry of Public Works

II. Description

1. Aim and objective

The aim is to carry out studies for the construction of a road to increase the national road network to keep abreast with the growing traffic.

2. Nature and constituent parts

The project consists of studies for the construction of 500 km road between Tadjoura and Dorra to a higher standard.

III. Justification; economic and financial analysis

1. Context and benefits

The road penetrates the inaccessible areas of the north-western part of the country. Since the climatic condition of this area is conducive for the development of agriculture, the Government intends to develop its cropping activities in order to speed up the economic development of the country.

2. Cost

The cost of the project is $0.60 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$0.60 million
External financing secured:	Nil
External financing required:	Nil

Project No. ROP-12-004

DJIBOUTI: STUDY ON THE DIKHIL-ASEYLA ROAD (38 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Studies for the construction of a road linking Dikhil and Aseyla (38 km)

Location: Southern Djibouti

Cost: $0.74 million

External financing required: $0.74 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of Transport

Project management authority: Ministry of Public Works

II. Description

1. Aim and objective

The aim is to carry out studies for the construction of a road link to connect Dikhil to Aseyla.

2. Nature and constituent parts

Thepproject consists of studies for the construction of 38 km of road between Dikhil and Aseyla.

III. Justification: economic and financial analysis

1. Context and benefits

Dikhil is the capital of the southern district where agriculture is well developed. The building of the road will help the exploitation of the land suitable for agriculture. The road will also be of major importance for the development of tourism in the vicinity of Lake Abbe in the deep south of the country.

2. Cost

The total cost of the project is estimated at $0.74 million

IV. Status

No information is available on the project status.

V. Financing

Local financing required or expected:	:	Nil
External financing secured:	:	Nil
External financingIrequired:	:	$0.74 million

Project No. ROP-14-001

EQUATORIAL GUINEA: ESTABLISHMENT OF A NATIONAL ROADS AND PUBLIC WORKS ENTERPRISE

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Establishment of a national roads and public works enterprise

Location: Capital and the national territory

Cost: $2.09 million

External financing required: $2.09 million

Duration: Two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Transport

II. Description

1. Aim and objective

The objective is to upgrade the resources for rehabilitating and maintaining the roads network and to improve efficiency and accounting so as to keep track of costs and develop an autonomous accounting system.

2. Nature and constituent parts

Beginning with the existing small teams, a three-year technical assistance programme will, with minimum equipment, set up a national department that will later on take over all responsibility. It will have some au autonomy in management.

III. Justification: economic and financial analysis

1. Context and benefits

The need to rehabilitate the roads network is overdue. The current situation especially on the mainland, can only paralyze efforts at reviving the economy. The creation of this department is appropriate and in keeping with the country's political options.

2. Cost

The cost of this project is estimated at $2.09 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	:	Nil
External financing secured:	:	Nil
External financing required:	:	$2.09 million

Project No. ROP-14-002

EQUATORIAL GUINEA: REHABILITATION OF THE MALABO-LUBA ROAD (56 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Rehabilitation of an asphalted road with double surface construction and reconstruction of concrete structures (56 km)

Location: Bioko island

Cost: $1.58 million

External financing required: $1.58 million

Duration: Approximately two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Transport

II. Description

1. Aim and objective

The objective is to implement part of the programme for the rehabilitation of road infrastructure in order to enhance the value of agricultural products in the region.

2. Nature and constituent parts

The project will include the division of the roadway, the reconstruction of concrete structure, the repair of the shoulders and the ditches along the road and the horizontal and vertical markings.

III. Justification; economic and financial analysis

1. Context and benefits

The region concerned has a high potential for agricultural products the value of which could be enhanced for export (cocoa).

2. Cost

The cost of the project is estimated at $1.58 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.58 million

Project No. ROP-14-003

EQUATORIAL GUINEA: REHABILITATION OF THE LUBA-RIABA ROAD (30 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Rehabilitation of a paved road and reconstruction of concrete structures (30 km)

Location: Bioko island to the south

Cost: $2.16 million

External financing required: $2.16 million

Duration: One year

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Transport

II. Description

1. Aim and objective

The objective is to make the Riaba area accessible and open up the Moka area which has a high potential for the development of horticulture.

2. Nature and constituent parts

The project will include the repair of the road surface, the reconstruction and reinforcement of concrete structures, the repair of shoulders and ditches and vertical and horizontal markings.

III. Justification: economic and financial analysis

1. Context and benefits

The road will help develop farms in the southern part of the island, and ease the evacuation of farm products through Malabo for export.

It complements the rehabilitation of the Moka road.

2. Cost

The cost of the project is estimated at $2.16 million.

IV. Status

No information is available on the project status

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$2.16 million

Project No. ROP-14-004

EQUATORIAL GUINEA: REHABILITATION OF THE MUSOLA-MOKA ROAD (15 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Rehabilitation of a paved road 15 km long

Location: Bioko island to the south

Cost: $1.07 million

External financing required: $1.07 million

Duration: One year

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Transport

II. Description

1. Aim and objective

The objective is to make the Moka area accessible and consequently d develop horticulture in the area.

2. Nature and constituent parts

The project will include the repair of the road surface, the cleaning of the shoulders and ditches and vertical and horizontal markings.

III. Justification; economic and financial analysis

1. Context and benefits

This project is important for the development of the horticultural potential of the Moka area, for the distribution and export of the produce therefrom. It will contribute to the rehabilitation of the Bioko roads network.

2. Cost

The cost of the project is estimated at $1.07 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.07 million

Project No. ROP-14-005

EQUATORIAL GUINEA: REHABILITATION OF THE MALABO-RIABA ROAD (60 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Rehabilitation of a paved road 60 km long

Location: Bioko island to the east

Cost: $1.69 million

External financing required: $1.69 million

Duration: Two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Transport

II. Description

1. Aim and objective

The objective is to make the capital accessible to the entire eastern area of the island and consequently develop this area.

2. Nature and constituent parts

The project will include the repair of the road surface, the fill and compaction of approaches to certain structures, the cleaning of shoulders and the horizontal and vertical marking.

III. Justification: economic and financial analysis

1. Context and benefits

This project will fit into the roads network rehabilitation programme on the island of Bioko and will help resume development activity in the eastern area which produces cocoa, and will be able to export it through the port of Malabo.

2. Cost

The cost of the project is estimated at $1.69 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.69 million

Project No. ROP-14-006

EQUATORIAL GUINEA: REHABILITATION OF THE BATA-NUUE ROAD (130 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Rehabilitation of a paved road 130 km long

Location: Mainland, from Bata towards the north-east

Cost: $4.80 million

External financing required: $4.80 million

Duration: Two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Public Works

II. Description

1. Aim and objective

The objective is to develop an area with high agricultural productivity and to create a link to the meeting point of the borders between Equatorial Guinea, Gabon and Cameroon.

2. Nature and constituent parts

The project will include the rehabilitation of the surface, the application of double surface treatments, the construction of the bed layer, the repair of drainage system and the vertical and horizontal marking.

III. Justification; economic and financial analysis

1. Context and benefits

This project will help the resumption of development activity in a highly productive agricultural area and ease the export of products through the port of Bata. These products are now exported through Cameroon and Gabon, leading to losses of revenue to the State.

2. Cost

The cost of the project is estimated at $4.80 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$4.80 million

Project No. ROP-14-007

EQUATORIAL GUINEA : REHABILITATION OF THE BATA-MBINI ROAD (77 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Rehabilitation of a paved road 77 km long

Location: On the mainland, from Bata towards the south-west

Cost: $4.03 million

External financing required: $4.03 million

Duration: Two years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Public Works

II. Description

1. Aim and objective

The objective is to develop a farming area and ease the export of products through the port of Bata.

2. Nature and constituent parts

The project will include the rehabilitation of the road surface, the strengthening of the retaining walls, the repair of concrete structures, the cleaning of shoulders and ditches and the horizontal and vertical markings.

III. Justification; economic and financial analysis

1. Context and benefits

The rehabilitation of this road is vital to the resumption of development activity in the south-west area. This is an area for farming and forest exploitation. The evacuation of farm and forest products through the port of Bata will be made easier.

2. Cost

The cost of the project is estimated at $4.03 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$4.03 million

Project No. ROP-14-008

EQUATORIAL GUINEA: REHABILITATION OF ALL LATERITE ROADS ON THE MAINLAND (260 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Rehabilitation of a number of laterite roads (260 km)

Location: On the mainland

Cost: $3.26 million

External financing required: $3.26 million

Duration: Three years

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Public Works.

II. Description

1. Aim and objective

The objective is to enable this area of the mainland to receive supplies and evacuate agricultural export products to the port of Bata.

2. Nature and constituent parts

The project will include the roads surface, of concrete structure as well as that of port.

III. Justification: economic and financial analysis

1.1 Context and benefits

Repairs to the roads network on the mainland (excluding specific projects indicated elsewhere) is vital to the revival of economic activity in the area.

2. Cost

The cost of the project is estimated at $3.26 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$3.26 million

Project No. RCP-15-001

ETHIOPIA: CONSTRUCTION OF THE AZEZO-METEMA ROAD (217 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of Cairo-Gaborone Trans-East African Highway) for a disadvantaged country

Nature: Construction of a modern earth road between Azezo and Metema

Location: North-western Ethiopia close to the border with the Sudan

Cost: $42.00 million

External financing required: $31.50 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Construction

Project management authority: Ethiopian Transport and Construction Authority

II. Description

1. Aim and objective

The project is a contribution to the construction of the Cairo-Gaborone Trans-East African Highway. This section is the last and only non-all-weather portion of the Highway in Ethiopian territory. The aim of the project is the development of densely populated areas with diversified agriculture production (teff, barley, wheat, maize, vegetables and oil seeds) and dense main forest.

2. Nature and constituent parts

The project consists of upgrading the present road to a modern earth road and replacing Bailey bridges with concrete structures. Structures and drainage systems will be repaired or rebuilt. The roadbed will be 7 m wide.

III. Justification; economic and financial analysis

1. Context and benefits

This road crosses rich agricultural and forest regions. This area is currently underdeveloped, and the construction of this road should enhance its development. In particular, 200,000 ha of irrigable land in the Blue Nile Basin will be developed.

2. Cost

The cost of the project is estimated at $42.00 million.

IV. Status

Engineering studies have already been carried out.

V. Financing

Local financing received or expected:	$10.50 million
External financing secured:	Nil
External financing required:	$31.50 million

Project No. ROP-15-002

ETHIOPIA: TRAINING OF TRANSPORT OFFICERS

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Training abroad for transport officers

Location: Foreign countries

Cost: $4.20 million

External financing required: $4.20 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Construction

Project management authority: Ethiopian Transport Construction Authority

II. Description

1. Aim and objective

The objective is to train additional transport officers so as to improve the management of the expanding national roads network and the Ministry of Construction.

2. Nature and constituent parts

The project consists of the training of transport officers in various fields, as indicated below.

Field	Number	Period for each scholarship (in months)
(a) Transport planning	3	12
(b) Road construction	8	6
(c) Construction of seaports	4	12
(d) Engineering and testing of equipment	2	9
(e) Soil mechanization and foundations	2	9
(f) Photo laboratory techniques and interpretation	3	9
(g) Mechanical engineering	2	9
(h) Structural engineering	2	9
(i) System analysis	2	6
(j) Organizational management	2	6
(k) Finance	2	6
(l) Budget	2	6

III. Justification; economic and financial analysis

1. Context and benefits

The benefits from this programme will be felt in the various fields to which these specialists will be assigned. This project will thus help to strengthen and augment current supervisory activity especially in the improvement of the management of both the national roads network and transports.

2. Cost

The cost of the project is estimated at $4.20 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$4.20 million

Project No. ROP-15-003

ETHIOPIA: STUDY ON A VOCATIONAL TRAINING CENTRE

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: To carry out studies for expanding the existing training centre to serve the needs of Ethiopia and the East African subregion

Location: Addis Ababa

Cost: $0.26 million

External financing required: $0.26 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of Construction

Project management authority: Ethiopian Transport Construction Authority

II. Description

1. Aim and objective

The objective is to carry out studies for the extension of a training centre to develop skilled manpower in the fields of road construction and maintenance, equipment maintenance and management (mechanics, stock managers, etc.).

2. Nature and constituent parts

The project includes studies for the expansion of the existing centre into an East African subregional centre in order to serve the needs of the subregion and be able to accept students and trainees.

III. Justification; economic and financial analysis

1. Context and benefits

This project will make it possible to reduce costs and improve road construction and maintenance. As a subregional project, the centre will be able to accept students and trainees from neighbouring countries. It will also provide for vocational training facilities at the subregional level in this particular field.

2. Cost

The cost of the project is estimated at $0.26 million.

IV. Status

The design stage is in progress.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.26 million

Project No. ROP-15-004

ETHIOPIA: STRENGTHENING THE MAINTENANCE OF MAIN AND RURAL ROADS (FIRST PHASE)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Strengthening road maintenance to preserve the existing roads network in Ethiopia

Location: The entire country

Cost: $125.00 million

External financing required: $50.00 million

Duration: Eight years

Desirable starting date: 1984

Project initiator: Ministry of Construction

Project management authority: Ethiopian Transport Construction Authority

II. Description

1. Aim and objective

The objective is to strengthen Ethiopia's ability to maintain and preserve its existing and future roads network.

2. Nature and constituent parts

The project will include the purchase of equipment, spare parts and materials and the financing recurrent expenditure. These two items are approximately equivalent in value to between $30.70 million (in 1983) and $39.9 million (in 1990) per year.

III. Justification; economic and financial analysis

1. Context and benefits

This project will help preserve the existing roads network through timely interventions to reduce recurrent expenditure and transport costs.

2. Cost

The cost of the project is estimated at $125.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$75.00 million
External financing secured:	Nil
External financing required:	$50.00 million

Project No. ROP-15-005

ETHIOPIA: STRENGTHENING OF THE MOJO-AWASA ROAD (200 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of the Cairo-Gaborone Trans-East African Highway) for a disadvantaged country

Nature: Strengthening of the Mojo-Awasa road with asphalt concrete

Location: Southern Ethiopia

Cost: $25.00 million

External financing required: $19.00 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Construction

Project management authority: Ethiopian Transport Construction Authority

II. Description

1. Aim and objective

The objective is to contribute to the construction of the Cairo-Gaborone Trans-East African Highway and to protect the base course, which is at present under stress from excessive loads, from deterioration.

2. Nature and constituent parts

The road will be 6 m wide and paved with a layer of asphalt concrete after filling potholes and repairing bad sections. The 1-m wide shoulders, the drainage systems and the permanent structures will be repaired.

III. Justification; economic and financial analysis

1. Context and benefits

It is important that this road be strengthened urgently, considering the nature and intensity of the traffic on it. Only in this way can destruction of the roadway be avoided along with considerably high reconstruction costs.

Implementation of this project will help reduce both transport costs and high recurrent expenditure.

2. Cost

The cost of this project is estimated at $25.00 million.

IV. Status

The studies have been completed.

V. Financing

Local finacing received or expected:	$6.00 million
External financing secured:	Nil
External financing required:	$19.00 million

Project No. ROP-15-006

ETHIOPIA: STRENGTHENING OF THE NEKEMPTE-GHIMBI ROAD (160 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Strengthening of the Nekempte-Ghimbi road using bituminous concrete

Location: Western Ethiopia

Cost: $11.80 million

External financing required: $7.10 million

Duration: Two years

Desirable starting date: 1985

Project initiator: Ministry of Construction

Project management authority: Ethiopian Transport Construction Authority

II. Description

1. Aim and objective

The objective is to prevent the deterioration of the base course of the Nekempte-Ghimbi road which is a section of the road link between Ethiopia and the Sudan via Kurmuk.

2. Nature and constituent parts

The project will include the paving of the road surface using a layer of bituminous concrete after filling potholes. The road will be 6 m wide and the shoulders 0.5 m large. The shoulders will be repaired, the drainage system improved and the structuring strengthened.

III. Justification; economic and financial analysis

1. Context and benefits

1.

This project will help to reduce transport and maintenance costs, and to protect the base courses. Feasibility studies show an internal rate of return of 31 per cent.

This project will also help to reduce recurrent and transport costs.

2. Cost

The cost of this project is estimated at $11.80 million.

IV. Status

The feasibility studies have already been carried out.

V. Financing

Local financing received or expected:	$4.70 million
External financing secured:	Nil
External financing required:	$7.10 million

Project No. ROP-15-007

ETHIOPIA: CONSTRUCTION OF THE ARBA MINCH-YABELO ROAD (215 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Construction of a modern earth road between Arba Minch and Yabelo (215 km)

Location: Southern Ethippia

Cost: $26.00 million

External financing required: $19.50 million

Duration: Four years

Desirable starting date: 1986

Project initiator: Ministry of Construction

Project management authority: Ethiopian Transport Construction Authority

II. Description

1. Aim and objective

This road is being constructed in order to develop an area with a high potential for agriculture and stock breeding.

2. Nature and constituent parts

The project includes the building of a modern earth road, and the construction of permanent drainage systems and structures. The roadbed will be 6 m wide.

III. Justification; economic and financial analysis

1. Context and benefits

The proposed road will link the agricultural area. It will serve to the Cairo-Gaborone Trans-East African Highway. This is a priority project in the joint development of the Omo-Turkana basin by Ethiopia and Kenya. This road will also help the promotion of tourism in the area.

2. Cost

The cost of the project is estimated at $26.00 million.

IV. Status

The engineering design is in progress.

V. Financing

Local financing received or expected:	$6.50 million
External financing required:	Nil
External financing required:	$19.50 million

Project No. ROP-15-008

ETHIOPIA: CONSTRUCTION OF GHIMBI-KURMUK ROAD (330 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Upgrading of a service-to-traffic road to feeder standard

Location: Western Ethiopia

Cost: $8.80 million

External financing required: $6.60 million

Duration:

Desirable starting date: 1984

Project initiator: Ethiopian Transport Construction Authority

Project management authority: Ethiopian Transport Construction Authority

II. Description

1. Aim and objective

The objective of the project is to upgrade the existing road to a higher standard. This road is a vital link between Ethiopia and the Sudan, and is expected to facilitate the promotion of regional co-operation. Besides it will accommodate the anticipated development of traffic as a result of increased agricultural production in that rich area.

2. Nature and constituent parts

The project consists of an upgrading of an existing service-to-traffic road to a feeder standard.

III. Justification; economic and financial analysis

1. Context and benefits

The road serves as a link between Ethiopia and the Sudan thereby facilitating regional agricultural development programmes and the promotion of trade.

2. Cost

The cost of the project is estimated at $8.80 million.

IV. Status

The feasibility study is in course of preparation.

V. Financing

Local financing received or expected:	$2.20 million
External financing secured:	Nil
External financing required:	$6.60 million

Project No. ROP-15-009

ETHIOPIA: TECHNICAL ASSISTANCE STUDIES AND TRAINING FOR NATRACOR

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Technical assistance, studies and training for trucking and bussing system

Location: Addis Ababa

Cost: $4.80 million

External financing required: $4.10 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Transport and Communications

Project management authority: NATRACOR

II. Description

1. Aim and objective

The objective is to overcome existing problems in the field of transport, by carrying out comprehensive studies providing technical assistance and training personnel.

2. Nature and constituent parts

Technical assistance			Training		
Field	Number of experts	Duration (m/m)	Field	Number of trainees	Duration (m/m)
(a) Management specialist	2	18	(a) Transport planning	4	24 each
(b) Driver training specialist	2	12	(b) Industrial Accounting	5	24 "
(c) Accounting system specialist	4	16	(c) Maintenance supervisor	12	6-12 "
(d) Director of maintenance	2	17	(d) Technician	24	6-12 "
(e) Maintenance supervisor	2	16	(e) Supply and procurement	6	6-12 "
			(f) Transport management	2	24 "
			(g) Dispatching & control transport	4	12 "

III. Justification; economic and financial analysis

1. Context and benefits

The benefits will be felt in the various fields to which these specialists will be assigned. This will strengthen and add to the current supervisor activity, especially in the improvement of the management and control in the field of transport.

2. Cost

The cost of the project is estimated at $4.80 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$0.70 million
External financing secured:	Nil
External financing required:	$4.10 million

Project No. ROP 15-010

ETHIOPIA: REHABILITATION AND STRENGTHENING OF THE AWASH-MIESSO-KULUBI ROAD (250 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Strengthening of the road between Awash and Kulubi (250 km)

Location: Eastern Ethiopia

Cost: $10.00 million

External financing required: $6.00 million

Duration: Four years

Desirable starting date: 1984

Project initiator: Ministry of Construction

Project Management authority: Ethiopian Transport Construction Authority

II. Description

1. Aim and objectives

The improvement of the road will cut down transport and vehicle operation costs.

2. Nature and constituent parts

The project consists in strengthening the road and upgrading it to international standard by adapting its bearing capacity to the estimated traffic.

III. Justification; economic and financial analysis

1. Context and benefits

The improvement and strengthening of this road will be very advantageous, among them an increase in commercial and tourist traffic since there are a lot of trading and tourist sites in this area. In fact, the feasibility studies indicate a 33 per cent profitability rate at the domestic level.

2. Cost

The cost of the project is estimated at $10.00 million.

IV. Status

Engineering studies were undertaken in 1983.

V. Financing

Local financing received or expected:	$4.00 million
External financing secured:	Nil
External financing required:	$6.00 million

Project No. ROP-16-001

GABON: STUDY ON THE LALARA-EBORO SECTION OF THE LIBREVILLE-EBORO ROAD (375 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Studies for the construction of a modern road from Libreville to Eboro (Cameroon border)

Location: North-western and northern Gabon towards Cameroon

Cost: $3.45 million

External financing required: $3.45 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Works

Project management authority:

II. Description

1. Aim and objective

The objective of the project is to contribute to the completion of the network of international roads connecting with the trans-African highways. The aim of the project is to carry out studies for the establishment of a subregional road link between Gabon and Cameroon and to link Gabon to the Lagos-Mombasa Trans-African Highway, which crosses Cameroon.

2. Nature and constituent parts

The project consists of studies for the construction of a bitumen-surfaced road, or the rehabilitation of an existing bitumen-surfaced road, between Libreville and Eboro (Cameroon border). The present road is laterite-surfaced for 473 km and surfaced with two layers of bitumen for 100 km. The engineering design has been completed or is underway for various sections of the road to a total of approximately 500 km.

III. Justification; economic and financing analysis

1. Context and benefits

The Libreville-Bifoun section of the project is a section connecting with all Gabon's national main roads radiating from the capital, Libreville, to the interior of the country and neighbouring countries (Cameroon and the Congo). The Bifoun-Alembe-Lalara section gives access to the east and north of the country and hence to the two neighbouring countries. From Lalara to Eboro, the road crosses northern Gabon before reaching the Cameroon frontier. In addition to forestry resources, the areas crossed by the road produce cacao and vegetable crops, which supply the capital.

The construction of this all-weather road will help to improve the road link between Gabon and Cameroon and reduce transport cost. This should stimulate the development of the areas served by the road, which are among the most populated areas in Gabon.

A complementary project (Ebolowa-Ambam-Gabon border) has been submitted by Cameroon.

2. Cost

The cost of the project is estimated at $3.45 million.

IV. Status

The engineering design is in progress.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$3.45 million

Project No. ROP-16-002

GABON: STUDY ON THE CONSTRUCTION BIFOUN-DOUSSALA ROAD

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Studies for the construction of a bitumen-surfaced road from Bifoum to Doussala (Congo border)

Location: South-west Gabon

Cost: $4.00 million

External financing required: $4.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works

Project management authority:

II. Description

1. Aim and objective

The objective of the project is to contribute to the construction of the network of international roads connected to the trans-African highways; the Bifoun-Doussala road will make it possible to link southern Gabon and southern Congo to the Lagos-Mombasa Trans-African Highway across Cameroon; the proposed road will also make it possible to link Gabon to the future Tripoli-Windhoek Trans-Central African Highway, which will pass through Brazzaville. The aim of the project is to carry out studies for upgrading to bitumen standard a large section of the road linking the two capitals, Libreville and Brazzaville (via Lambarene).

2. Nature and constituent parts

The project consists of studies for the constructinn of a bitumen-surfaced road for the 375-km between Bifoun and Doussala (Congo border).

The existing road is made from laterite material and the width varies from 7 m to 7.40 m.

The engineering design has been completed except for 46 km between Ndenité and Doussala.

III. Justification; economic and financial analysis

1. Context and benefits

The N'Dende-Doussala road is an important component of the international roads connecting with the trans-African highways in Central Africa. It provides a link between the Gabonese capital, Libreville, and the Congolese capital, Brazzaville, and with Pointe-Noire, the second town in the Congo.

This is the only road in the interior of Gabon which links the areas traversed with the capital of the country. It crosses the forest area of Fougamou and N'Dende and serves important tourist towns such as Lambarene and Mouila. It will facilitate the transport of food crops (the road crosses large palm and banana plantations).

2. Cost

The cost of the project is estimated at $4.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$4.00 million

Project No. ROP-16-003

GABON: CONSTRUCTION OF A ROAD TO CONNECT ALEMBE AND LECONI (SECOND PHASE: 103 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Study and construction of a bitumen-surfaced road from Alembé to Laconi (103 km)

Location: South-western Gabon

Cost: $45.00 million

External financing required: $45.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works

Project management authority:

II. Description

1. Aim and objective

The objective of the project is to contribute to the construction of the network of international roads connecting with the trans-African highways. The project will make it possible to link areas of Gabon and the Congo with the Lagos-Mombasa Trans-African Highway through Cameroon, and to link Gabon with the future Tripoli-Windhoek Trans-Central African Highway. The aim of the project is to establish a bitumen-surfaced road link between Gabon and the Congo via Moanda and Franceville and to link the rest of the country with areas south-west of the capital, Libreville.

2. Nature and constituent parts

The project comprises studies leading to the construction of a bitumen-surfaced road from Alembe to Laconi (near the Congo border). At Alembé, the proposed road branches off onto the Libreville-Cameroon road. The existing road is laterite and bitumen-surfaced and the width varies from 5 m to 10 m.

III. Justification; economic and financial analysis

1. Context and benefits

On the international level, the road will provide a link between the Gabon and Congo road networks through south-eastern Gabon, and make it possible to link a number of areas with the trans-African highways; it will provide an international link via Libreville-Brazzaville to complete the one passing through Lambarene.

In Gabon, the road will make it possible to link the south-west of the country, particularly the important areas of Moanda-Mounana (manganese and uranium mines) and Franceville (sugar industry and electric battery manufacture) with Libreville. Transport costs will be appreciably reduced. The proposed road also crosses the forest zone of Lastourville.

2. Cost

The cost of the project is estimated at $45.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$45.00 million

Project No. ROP-16-004

GABON: CONSTRUCTION OF A ROAD TO CONNECT PORT GENTIL AND BIFOUN

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Construction of a bitumen road between Port Gentil and Bifoun (with 13 structures with a total length of 1,920 m)

Location: Western Gabon

Cost: $173.00 million

External financing required: $173.00 million

Duration: Five years

Desirable starting date: 1984

Project initiator: Ministry of Public Works and Construction

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to establish a road link between the commercial capital, Port Gentil, and the rest of the country. This main road meets a feeder road of the Trans-African Highway at Bifoun.

2. Nature and constituent parts

The project consists of constructing a 254-km bitumen road between Port Gentil and Bifoun. Feasibility studies have been completed. The projected road will be dual carriageway and paved. Its length is 254 km, the speed will be 60 kph. the width 7 m and the shoulders 2 m wide.

III. Justification; economic and financial analysis

1. Context and benefits

At the national level this road will open up the entire maritime province since Port Gentil is linked with the rest of the country by sea, river and air. The road will also make it possible to open up the great oil producing region to the rest of the country so as to enhance trade. Lastly, at the international level, the proposed road will link Port Gentil with major international arteries.

2. Cost

The cost of the project is estimated at $173.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$173.00 million

Project No. ROP-17-001

THE GAMBIA: MAINTENANCE OF ROADS IN THE GAMBIA

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Maintenance of existing road system

Location: Nation-wide coverage

Cost: $12.30 million

External financing required: Nil

Duration: Ongoing

Desirable starting date: 1984

Project initiator: Ministry of Works and Communications

Project management authority: Department of Public Works

II. Description

1. Aim and objective

The objective of this project is to keep the existing road from deteriorating and thereby save the investment put into road and structures.

The ongoing highway maintenance programme which is financed by USAID and IDA/EEC is expected to be completed in 1983-1984. With the projected completion of the new Banjul-Serekundu highway and the Laminkoto-Passimus road during the second plan period, the mileage of the road network increases and there will be a need for a second comprehensive road maintenance programme.

2. Nature and constituent parts

A study should be undertaken for the preparation of work schedule and the selection of roads to be maintained. The financing of the new maintenance programme must be sought by the Government before the actual programme can be implemented. The study will take into account the experience gained with the first highway maintenance programme.

The implementation of the new maintenance programme should overlap with the first maintenance programme to maintain continuity and save the cost already incurred for mobilization, equipment, etc.

III. Justification; economic and financial analysis

1. Context and benefits

Timely maintenance will prevent the existing road system from deteriorating beyond economical routine maintenance. It will also give a maximum benefit from the large investment put into the infrastructures in the Gambia by avoiding expensive reconstruction and rehabilitation.

2. Cost

The cost of the project is estimated at $12.30 million. As to the financing, USAID and IDA/EEC being involved in the first highway maintenance programme made some provisions for a study into a follow-up project of the first programme.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected: $0.30 million
External financing secured: $12 millio$12.00 million
External financing required: Nil Nil

Project No. ROP-17-002

THE GAMBIA: CONSTRUCTION OF THE LAMINKOTO-PASSIMUS ROAD (151 KM)

I. Identification and summary

Origin of the project : Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Construction of a two-lane bitumen-surfaced road

Location: North-eastern Gambia

Cost: $16.00 million

External financing required: $8.00 million

Duration: 18 months

Desirable starting date: 1984

Project initiator: Ministry of Works and Communications

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to contribute to the subregional integration and trade development with neighbouring countries, and also complete the road which acts as a feeder to the Trans-African Highway network at Farafenni.

The aim is to construct the road in order to connect the isolated eastern region with the rest of the country. The road will facilitate the transfer of goods and people between north and south bank. It would also extend the north side trunk route all the way to the eastern border and provide the missing segment of that major link with the interior of the country.

2. Nature and constituent parts

The project consists of the construction of the road from Laminkoto to Passimus, with spur roads to Bansang (18 km) and Basse (13 km), according to the existing Gambian local standards, i.e., 6-m running surface, 9-m wide formation width. A bridge is to be constructed over the Sandugu Bolon River near Sami. The consultancy services for supervision of the project are also included.

The initial study was carried out by NEDECO consultants in 1979. In May 1980 the project was appraised by the African Development Bank team of experts as a result of which a loan of I.D. 192,000 was obtained for technical assistance to review the NEDECO consultants study in September 1981.

III. Justification; economic and financial analysis

1. Context and benefits

According to an African Development Fund appraisal mission of March 1980, the internal rate of return (IRR) was 22 per cent. This was taking into account savings from vehicle operating cost, time savings, increase in producer surplus due to net benefits from increased farm production and decrease in recurrent and periodic maintenance cost.

In addition to the quantifiable benefits, there are also the intangible benefits of the impact of the road construction on all aspects of socio-economic situation of the country.

III. Cost

The cost of the project is estimated at $16.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	$8.00 million
External financing required:	$8.00 million

Project No. ROP 17-003

THE GAMBIA: ENGINEERING STUDY ON A BRIDGE BARRAGE ON THE GAMBIA RIVER

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Engineering studies of the construction of a bridge barrage over the Gambia river

Location: On the Gambia river at Yallitenda

Cost: $10 million

External financing required: $10 million

Duration: Three years

Desirable starting date: 1985

Project initiator: Ministry of Works and Communications

Project management authority: Department of Public Works

Best copy available

II. Description

1. Aim and objective

The objective of the project is to carry out engineering studies for the construction of a bridge barrage over the Gambia at Yallitenda to supply water for irrigating the surrounding fertile areas and to establish an all-weather link with the trans-Gambian highway.

2. Nature and constituent parts

The studies for the construction of a bridge barrage over the river Gambia will focus on the site, the earthworks and dredging, the construction of the bridge itself as well as the construction of dykes.

III. Justification; economic and financial analysis

1. Context and benefits

The bridge barrage will serve as an all-weather link with the trans-Gambian highway. Road traffic will be continuous and will only have to be interrupted to allow boats to pass under the bridge. As much as 24,000 hectares of land could be irrigated, which will help increase rice cultivation to meet the food requirements of the area.

2. Cost

The cost of the project is estimated at $10 million.

IV. Status

The feasibility study has been completed.

V. Financing

Local financing received or expected:	To be determined but will be very small	
External financing secured:	Nil	Nil
External financing required:	$10 million	$10.00 million

Project No. ROP 17-004

THE GAMBIA: PROJECT ON PUBLIC TRANSPORT

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Purchase of public transport equipment and spare parts

Location: The Gambia

Cost: $5.10 million

External financing required: $5.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Public Works and Communications

Project management authority: Department of Public Works

II. Description

1. Aim and objective

The objective of the project is to provide adequate public transport facilities in Gambian towns to meet passenger transport requirements.

2. Nature and constituent parts

The project consists in the purchase of 50 buses and spare parts for operating the new system. Public transport management personnel will also be trained under the project.

III. Justification; economic and financial analysis

1. Context and benefits

The establishment of a public transport system will facilitate movements within the city. Fares can be revised to make the service capable of functioning without government subsidy but on its own resources.

2. Cost

The cost of the project is estimated at $5.10 million.

IV. Status

Financing has already been received from KFW and the Gambia shall contribute $0.10 million.

V. Financing

Local financing received or expected:	$0.10 million	
External financing secured:	$5.00 million	$5.00 million
External financing required:	Nil	Nil

Project No. ROP 17-005

THE GAMBIA: CONSTRUCTION OF THE BANJUL-SERREKUNDA ROAD (12 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a (disadvantaged country)

Nature: Construction of the road between Banjul and Serrekunda (12 km)

Location: Eastern Gambia

Cost: $20.00 million

External financing required: $19.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Communications.

Project management authority: Department of Public Works

II. Description

1. Aim and objective

The objective of the project is to construct a 12-km long, four-lane road between Banjul and Serrekunda to allow safe vehicle traffic.

2. Nature and constituent parts

The project consists in widening the existing two-lane road into a four-lane road to meet the ever-increasing traffic between Banjul and Serrekunda.

III. Justification; economic and financial analysis

1. Context and benefits

The increase in the volume of traffic between Banjul and Serrekunda calls for the widening of the road into four lanes, to avoid congestion of traffic. This will cut down travel time and reduce fuel consumption considerably.

2. Cost

The cost of the project is estimated at $20.00 million.

IV. Status

Construction should start in mid-1984.

V. Financing

Local financing received or expected:		$1.00 million
External financing secured:		$19.00 million
External financing required:	Nil	Nil

Project No. ROP 17-006

THE GAMBIA: CONSTRUCTION OF THE BUNIADU-ALBREDA-KUNTAIR ROAD

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a (disadvantaged country)

Nature: Construction of the road between Buniadu and Kuntair (56 km)

Location: Northern Gambia

Cost: $3.60 million

External financing required: $3.50 million

Duration: Three years

Desirable starting date: 1983

Project initiator: Ministry of Works and Communications

Project management authority: Department of Public Works

II. Description

1. Aim and objective

The objective of the project is to establish a road link between the major centres of Gambia, particularly in the north of the country.

2. Nature and constituent parts

The project consists in constructing 56 km of road in accordance with international geometric standards, which will be passable all year round.

III. Justification; economic and financial analysis

1. Context and benefits

The construction of the road will facilitate communication between the areas in northern Gambia and the evacuation of foodstuffs to Banjul, the main consumption centre.

2. Cost

The cost of the project is estimated at $3.60 million.

IV. Status

The project has been in progress since 1981.

V. Financing

Local financing received or expected:	$0.10 million
External financing secured:	$2.50 million
External financing required:	$1.00 million

Project No. ROP 17-007

Project No. ROP 17-007

THE GAMBIA: CONSTRUCTION OF THE MANDINABA-SELETY ROAD

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a (disadvantaged country)

Nature: Construction of 14 km of road between Mandinaba and Seleti

Location: Between Mandinaba and Seleti

Cost: $2.50 million

External financing required: $2.50 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of Public and Community Services

Project management authority: Department of Public Works

II. Description

1. Aim and objective

The objective of the project is to establish an all-weather road link between the towns of Mandinala and Seleti.

2. Nature and constituent parts

The project consists in the construction of an all-weather road to connect Mandinaba and Seleti.

III. Justification; economic and financial analysis

1. Context and benefits

The Mandinaba-Seleti road is part of the Lagos-Nouakchott trans-West African highway. It is essential to construct this section of road in order to complete the highway and establish a continuous link between Lagos and Nouakchott.

2. Cost

The cost of the project is estimated at $2.50 million.

IV. Status

Studies have already been undertaken and implementation will start in 1984.

V. Financing

Local financing received or expected:	$2.50 million
External financing secured:	Nil
External financing required:	Nil

Project No. ROP 18-001

GHANA: REHABILITATION OF THE TEMA-GOGAKOFE SECTION OF THE TEMA-AFLAO ROAD (79 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (section of the Trans-West African Highway)

Nature: Bitumen surface highway, rehabilitation work of the pavement

Location: South Ghana

Cost: $85.75 million

External financing required: $85.75 million

Duration: Five years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The objective of this project is to improve the only missing section of the Trans-West African Highway in Ghana. The Tema to the Ivory Coast border road is either improved or programmed to be improved (World Bank financing).

2. Nature and constituent parts

The pavement of the existing bitumen surface work has failed in several places making road travelling extremely dangerous. Under this project the road is to be rehabilitated and provided with a strong pavement. The horizontal alignment needs practically no change at all.

Contract documents were almost complete but some 6-8 man-months of time would be required to review current traffic volume for pavement design and complete soil investigations, assess materials availability and finalize contract documentation.

III. Justification; economic and financial analysis

1. Context and benefits

The rehabilitation of the Tema-Aflao road will complete the missing link of an otherwise improved or programmed to be improved highway that stretches from Lome (Alfao) to Elubo on the Ivory Coast border as part of the Lagos-Nouakchott Trans-West African Highway.

The condition of the remaining section of this international highway is as follows:

(a) Tema-Accra (16 km), concrete motorway in good condition,
(b) Accra-Yamoransa (113 km), an IBRD rehabilitation project,
(c) Yamoransa-Takoradi (90 km), an IBRD rehabilitation project,
(d) Takoradi-Axim (63 km), in fair condition for road ability,
(e) Axim-Elubo (80 km), EDF/ADB project ready for contracting.

Traffic counts in 1974 show a weighted average for the whole road being 978 v/p/d. of 970 vehicles per day.

The 1978 origin-destination survey by the Ghana Highway Authority gave average annual daily traffic of 1,400. An average annual growth rate of 4 per cent was estimated.

2. Cost

The cost of the project is estimated at $85.75 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$85.75 million

Project No. ROP 18-002

GHANA: STUDY ON THE TEMA-AKOSOMBO ROAD AND ACCESS ROADS TO THE PORTS OF AKOSOMBO, TENUGAGA AND TEMALE (78.T.18)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Rehabilitation of Tema-Akosombo-road, and construction of access roads to Akosombo, Tenugaga and Temale ports

Location: East central Ghana

Cost: $0.52 million

External financing required: Nil

Duration: One to two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The aim is to provide good strong roads linking the port of Tema and the commercial cities in the south to Akosombo and to link Temugaga and Yapei ports to their corresponding supply depots.

Though this is a national road it could open up the Upper Volta by providing access to Ouagadougou. Forming part of the Volta Lake Transport System are the access roads which lead to and from the adjoining towns, port and ferry landing stages.

2. Nature and constituent parts

The project consists of the rehabilitation of the Tema-Akosombo road; and construction of access roads to Akosombo, Temugaga and Tamale ports (78.5 km). Apart from the access road from Temugaga to the port, which will involve building a completely new road, the two other access roads, namely, the Tema port to Akosombo port and the one leading to Tamale port from Yapei will need only improvement to the existing road pavements.

The works on the access roads from Tema to Akosombo port and those to Tamale and Temugaga ports could start as soon as funds become available. Tema port to Akosombo road needs some survey and redesign prior to commencement of construction work.

III. Justification; economic and financial analysis

1. Context and benefits

The reconstruction of the access roads to the ports on the Volta Lake will establish an economical through-freight-haulage route between Tema port in Ghana and Ouagadougou, the capital of the Upper Volta. It will thus contribute immensely not only to freight haulage services in Ghana but also to the opening up of the Upper Volta and consequently also the Niger.

2. Cost

The cost of the project is estimated at $0.52 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$0.52 million
External financing secured:	Nil
External financing required:	Nil

Project No. ROP 18-003

GHANA: STUDY ON THE ACCRA-KUMASI-TECHIMAN-TAMALE-PAGA ROAD (836 KM)

I. **Identification and summary**

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Reconstruction of the existing road

Location: Mid-longitudinal section of the country

Cost: $2.00 million

External financing required: Nil

Duration: Five years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The objective is to carry out studies to provide a direct link between Upper Volta and the ports of Ghana. It will therefore open up land-locked Upper Volta either to the Volta Lake transport system or directly to the ports of Takoradi and Accra. It is also the connecting link between the Trans-Coastal and Trans-Sahelian roads of the West African countries.

2. Nature and constituent parts

The project consists of studies for the reconstruction of the existing road from Kumasi to Paga along more or less the existing alignment and the construction of the Accra-Kumasi leg of the Golden Triangle. Strong road pavement equivalent to crushed rock base standard is envisaged for this connector link. Presently the 70-km Soromuasi-Horno stretch is under construction to 8.5 m width with good laterite base and bitumen surface.

III. Justification; economic and financial analysis

1. Context and benefits

This is a vital project which serves a dual purpose of completing the Volta Lake transport system access to the Upper Volta and also as a connector link to the Trans-Coastal and Trans-Sahelian Highways.

The position of this road along the mid-longitudinal sector of the country gives it a wide area of influence and it is fed by several minor feeder and connector links.

2. Cost

The cost of the project is estimated at $2.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$2.00 million
External financing secured:	Nil
External financing required:	Nil

Project No. ROP 18-004

GHANA: REHABILITATION OF ACCRA-YAMORANSA ROAD (113 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Rehabilitation to asphalt concrete pavement over crushed rock base

Location: Southern Ghana

Cost: Study: $58.00 million

External financing required: $36.30 million

Duration: Two to three years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The road is a link in the Trans-West African Highway that passes through Ghana. This section of the coastal route will remain the only part with gravel base and bitumen surface when the Tema-Aflao and Axim-Apataba-Elubo sections are completed to crushed rock base standard and asphalt finishing. The objective is to make uniform the engineering characteristics of the road and to provide stronger pavement for projected traffic.

2. Nature and constituent parts

The project consists of the rehabilitation of the existing road to asphaltic concrete pavement over crushed rock base thus providing asphaltic concrete finish.

The existing road is 7.3 m wide single carriageway. Continued and regular maintenance efforts has kept the bitumen surface in fairly good state and the gravel base is fairly good.

Survey and design have already been carried out on the Accra-Manesim section by consultants, Messrs. Scott Wilson Kirkpatrick and Partners, and work could commence as soon as funds and an efficient contractor are obtained.

III. Justification; economic and financial analysis

1. Context and benefits

The reconstruction of this road will serve to accommodate the projected high international traffic of the Trans-West African coastal route as well as serve as a link road which leads to the two national ports of Tema and Takoradi.

The average daily traffic on this road varies between 1,600 to 2,500 and a traffic growth rate of about 4 per cent is assessed.

In 1971 the road was identified as one of the stretches to be rehabilitated with the World Bank financing when the Ghana road rehabilitation programme was undertaken. But financial constraints have relegated this activity to just routine and periodic maintenance.

2. Cost

The cost of the project is estimated at $58.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	**$21.70 million**
External financing secured:	**Nil**
External financing required:	**$34.80 million**

Project No. ROP 18-005

GHANA: REPAIR OF THE TAKORADI-AXIM ROAD (60 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Rehabilitation of the existing road to a higher standard

Location: South-western Ghana

Cost: $65.45 million

External financing required: $49.10 million

Duration: One to two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objectives

The objective of the project is to improve the alignments and thereby increase driving speed from present 30 kph to about 100 kph, to strengthen pavement to crushed rock base and asphalt surface standard so as to cope with projected traffic and to make the Ghana portion of the coastal route of uniform geometric and engineering characteristics.

2. Nature and constituent parts

The project consists of the rehabilitation of 60 km of an existing road to asphalt concrete surface. The pavement would be constructed with 200 mm crushed rock base laid on 150 mm natural gravel sub-base.

The existing road has a moderate bitumen surface over moderate gravel base. The horizontal alignment, especially between Agona and Axim (34 km) however, needs considerable improvement.

The final engineering design is complete.

III. Justification; economic and financial analysis

1. Context and benefits

This is a primary road 60 km in length along the coast of Ghana. It is part of the coastal route of the Trans-West African Highway.

This road at present carried between 250 and 1000 vehicles daily. Traffic volume is expected to increase as a result of trade among the countries of West Africa. Long lines of vehicles would be expected to use this road and the existing tortuous alignments would be most unsuitable. Moreover increased axle loading on the road will require stronger pavement. The improvement of the road would also be a logical extension of the already ongoing improvements to the east and west of this road section.

2. Cost

The estimated cost of the project is estimated at $25.45 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$16.35 million
External financing secured:	Nil
External financing required:	$49.10 million

Project No. ROP-18-006

GHANA: REPAIR OF THE SALAGA-TAMALE ROAD (110 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Rehabilitation of an existing road

Location: North-central Ghana

Cost: $33.50 million

External financing required: $29.86 million

Duration: Three years

Desirable starting date: 1986

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The objective of the project is to lower road user costs for traffic and provide reliable and comfortable riding surface for traffic from the lake ahead (Makongo) to Tamale so as to ensure easy north-south-north utilization of the Volta Lake as a means of transportation.

Though the project is called Salaga-Tamale, it really starts from Mokongo some 30 km to the south of Salaga and ends at Chambulugu a few km to the south of Tamale.

2. Nature and constituent parts

The project consists of the rehabilitation of an existing but narrow old and damaged bitumen surfaced road.

The rehabilitation includes widening and slight improvement to alignment and two coats of bitumen surface over ordinary gravel base.

III. Justification; economic and financial analysis

1. Context and benefits

The main justification of this project is that it will serve as a port access road connecting the Northern and Upper Regions with the south via Volta Lake. Consequently it is expected that the road will carry considerable north-south-north Ghanian traffic as well as part of the traffic on the connector link of the Trans-Sahelian and Trans-Coastal route. Its improvement will ease traffic flow along that corridor and will accommodate projected growth in traffic too. Vehicle running cost will be lowered and travel times shortened.

Preliminary economic analysis of the project by consultants Messrs. Scott Wilson Kirkpatrick and Partners early this year yielded an internal rate of return of 16 per cent.

IV. Status

No information is available on the project status

V. Financing

Local financing received or expected:	$3.64 million
External financing secured:	Nil
External financing required:	$11.26 million

Project No. ROP-18-007

GHANA: STUDIES ON THE TECHIMAN-EJURA-LAKE VOLTA ROAD (240 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project

Nature: Studies for the rehabilitation of the Techiman-Ejura road and the construction of a new road link east of Ejura to the western shore of Lake Volta

Location: South-central Ghana

Cost: $0.50 million

External financing required: $0.50 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The objective of this project is to carry out studies to establish a link between the Afram Plains and Ejura and to improve the poor sections of existing Ejura-Techiman link.

The project involves studies for the rehabilitation of the Techiman-Ejura road and the construction of a new road link east of Ejura to the western shore of the Kapandu ferry (of Lake Volta).

2. Nature and constituent parts

The project consists of studies for the rehabilitation of the 140-km long Techiman to Ejura road and the construction of about 100 km new section to be surveyed and designed.

Rehabilitation also includes improvement to alignment and widening of 53 km of the Ejura to Nkoranza road.

Economic and technical studies include survey, design and feasibility studies of a new route from Ejura through the Afram Plains to the western shore of Lake Volta. Survey and design for improvement to existing alignment of the Ejura-Nkoranza section would be done as part of this project.

The existing road between Techiman and Ejura is 82 km. The 53-km stretch from Ejura to Nkoranza is gravel surface with poor base and narrow width of not more than 6.7 m. The 29-km section from Nkoranza to Techiman however has good bitumen surface over good gravel base. The carriageway width is 7.3 m. No road exists between Ejura and the western shores of Lake Volta at the moment thus cutting the Afram Plains from vital communications link.

III. Justification: economic and financial analysis

1. Context and benefits

The Afram Plains is a vast inaccessible but potentially great agricultural area in the country. It is therefore desirable to open up this area by providing a penetration route. Provision of the road, it is expected, will open up large acreages of farmland while making the people living there feel that they are part of the country.

2. Cost

The cost of the project is estimated at $0.50 million.

IV. Status

No information is available on the project status

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.50 million

Project No. ROP-18-008

GHANA: STUDY ON THE BOLGATANGA-BAWKU ROAD (79 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project

Nature: Studies for the rehabilitation of an existing road

Location: North-eastern Ghana

Cost: Study $0.30 million

External financing required: Nil

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The objective is to carry out studies for the rehabilitation of one of the primary roads which links two very important settlements in the Upper Region of Ghana, namely Bolgatanga, the regional capital and Bawku, an important commercial and cultural centre. This road is the eastern wing of an important east-west link in the Upper Region of the country.

2. Nature and constituent parts

The project comprise of studies for the rehabilitation of an existing road with two ccats of bitumen surface.

The existing road has bitumen surface over moderate gravel base. Carriageway width varies from 12.2 m on the 56 m Bawku-Nangodi section to 7.3 m on the Nangodi-Bolgatanga section. Existing alignment is fairly good and may require only some minor improvements. The bitumen surface appears moderate for most sections of the road but cannot stand any significant traffic increases in the future.

III. Justification; economic and financial analysis

1. Context and benefits

The rehabilitation of this road will improve travel times between these two most important settlements in northern Ghana. Present average driving speed is about 80 kph and the rehabilitation will improve to 100 kph standard, thus saving travel time and perhaps reducing vehicle running cost on the road.

Vehicular traffic on this road is just below 200 per day with a projected growth of between 2 and 3 per cent per annum.

2. **Cost**

The cost of the project is estimated at $0.30 million.

IV. **Status**

No information is available on the project status.

V. **Financing**

Local financing received or expected:	$0.30 million
External financing secured:	Nil
External financing required:	Nil

Project No. ROP-18-009

GHANA: CONSTRUCTION OF THE CAPE COAST-TWIFU PRASO ROAD (71.6 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project

Nature: Construction of Cape Coast-Twifu Praso road to a bitumen standard

Location: South-western Ghana

Cost: $26.60 million

External financing required: $19.95 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The aim is to improve the existing road. This is currently the shortest link between the central regional capital (Cape Coast) and Dunkwa, an important administrative centre in the region. It also leads to the Twifu oil palm plantation.

2. Nature and constituent parts

The project consists of constructing the whole road to uniform surface and design standards to enable it serve best links between Cape Coast and Dunkwa.

The first 19-km stretch of the existing road from Cape Coast is already under construction to 7.3 m wide carriageway over good gravel base. The surface is of good bitumen. The next 58-km section is however gravel surface of 8.0 m width. The base is good to fair gravel.

III. Justification; economic and financial analysis

1. Context and benefits

The reconstruction of this road will facilitate movement of goods and people between Cape Coast, the central regional capital, and the interior but important administrative centre of Dunkwa.

Traffic on the road decreases from some 100 vpd near Cape Coast to about 80 vpd near Twifu Praso. The present growth rate of about 2.5 per cent could be higher if the road is completed because of probable diversion of Cape Coast-Dunkwa traffic from route 19 which is currently the main route. The road gains some importance because of the Twifu-Praso Oil Palm Project currently being undertaken. Economic analysis of the project by consultants Scott Wilson Kirkpatrick and Partners gave an internal rate of return of 12 per cent.

2. Cost

The cost of the project is estimated at $26.60 million.

IV. Status

Survey and design of part of the road is already completed and it should not take too much time to have the whole road designed.

V. Financing

Local financing received or expected	$6666 million.
External financing secured:	Nil
External financing required:	$19.95 million

Project No. ROP-18-010

GHANA: REHABILITATION AND UPGRADING OF THE AGUNA-TARKINA-BAGOSO ROAD (100 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Construction of the road to improve the existing condition

Location: South-western Ghana

Cost: $34.88 million

External financing required: $25.90 million

Duration: Four years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The aim is to rehabilitate the road to a bitumen standard. This project provides the southern link to traffic from the western region as well as part of the traffic from the Ashanti Region to the port of Takoradi.

2. Nature and constituent parts

The project consists of rehabilitation of this road and to provide it with stronger pavement and better riding surface and geometry to meet the heavy traffic along the corridor.

The present condition of the road is a bitumen surfaced road with carriageway varying between 6.5 and 7.3 m. The vertical alignment is good for the most part of the Aguna-Tarkwa section only but the horizontal alignment of the whole road needs improvement. The base, and in some sections, the sub-base has already failed considerably.

The link situated to the north of this road is currently being improved and given the density of traffic on the Aguna-Bogoso road, it is only logical that this road section is also improved upon.

III. Justification; economic and financial analysis

1. Context and benefits

This road, which is the only direct link between the Brong Ahafo region and the western region is expected to carry almost all the timber and cocoa from the Brong Ahafo together with some foodstuffs to the export port of Takoradi. The existing traffic volume is 400 vpd and some additional traffic of about 150-200 vpd extra traffic expected to be added with the completion of the Mim-Bibiani project.

The road is also important to some extent for distribution of northbound imported goods and commodities manufactured at Takoradi. The execution of this project will therefore safeguard any bottleneck that might otherwise have arisen as a result of the already deteriorating condition of this stretch of road.

2. Cost

The cost of the project is estimated at $34.88 million

IV. Status

No information is available on the project status

V. Financing

Local financing received or expected:	$8.98 million
External financing secured:	Nil
External financing required:	$25.90 million

Project No. ROP-18-011

GHANA: BITUMEN SURFACING OF THE BAMBOI-HAMALE ROAD (367 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project

Nature: Rehabilitation to bituminous surface standard

Location: North-western Ghana

Cost: $123.05 million

External financing required: $92.29 million

Duration: Four years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The objective of the project is to make this an all-purpose road with bitumen surface and with uniform design standard.

2. Nature and constituent parts

The project consists of rehabilitation of the road to bituminous surface standard.

The road is primary and borders the Ghana-Ivory Coast boundary. It is partly bitumen surfaced but gravelled for the most part. Inadequate regravelling and infrequent grading have made sections of the road unpleasant to use. The road varies in width from about 6.7 m in sections to some 7.3 m in others.

III. Justification; economic and financial analysis

1. Context and benefits

This road, being a primary road along the border, is a very important one. Besides, though not officially the connector link between the Trans-Sahelian and Trans-coastal routes, the route can serve this function when the occasion arises.

With average driving speed about 60 kph or less along this road and the very dusty nature of the road, its improvement can bring immense benefits by way of reduction in running costs of vehicles, savings in travel times, and a more healthy and comfortable driving environment.

2. Cost

The cost of the project is estimated at $123.05 million.

IV. Status

Design and surveys have been completed for almost all the stretch at various times and relevant study reports only need updating.

V. Financing

Local financing received or expected:	**$30.76 million**
External financing secured:	**Nil**
External financing required:	**$92.29 million**

Project No. ROP-18-012

GHANA: REHABILITATION OF THE YAMORANSA-ANWIANKWANTA ROAD (162 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Reconstruction and resurfacing of the road

Location: Southern Ghana

Cost: $83.00 million

External financing required: $62.00 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The aim is to improve an existing old road to a higher standard in order to get maximum service from it.

This road is an alternative route linking the Ashanti Region, a large producer of timber, cocoa and foodstuffs and the port of Takoradi.

2. Nature and constituent parts

The project consists of the reconstruction and resurfacing of 162 km of road between Tetsi Junction and Anwiankwanta.

The existing one is an old bitumen-surfaced road with very badly deteriorated sections, poor drains and verges, narrow running surface and poor alignments. Even in sections where maintenance works have been repeatedly undertaken, the road shows signs of rapid failure, and indications are that it requires complete reconstruction.

The road may be considered into sections of almost equal length: Tetsi Junction to Praso and Praso to Anwiankwanta.

III. Justification; economic and financial analysis

1. Context and benefits

This road serves as an alternative route to the Dunkwa road for the north-south flow of export commodities and the south-north flow of manufactured and imported goods. The road traverses rich timber, cocoa, orange and oil palm cultivation zones, all of which contribute traffic to the road. Besides, it is the main link of the Central Region with the contiguous Ashanti Region.

A preliminary engineering inventory and traffic survey conducted on the project in early 1980 by the Ghana Highway Authority show that a lot will be saved by way of reducing vehicle operation cost were the surface and geometry of the road improved. Economic analysis carried out by consultants Scott Wilson Kirkpatrick and Partners for the Bekwai-Foso section yielded a moderate internal rate of return of 15 per cent.

An average daily traffic of 461 vpd has been estimated for 1981. Reconstruction of the road will help accommodate growth in traffic on this route, the Ashanti Region being one of the fastest growing regions.

2. Cost

The cost of the project is estimated at $83.00 million.

IV. Status

Survey and design has been completed for the Tetsi-Praso section and survey work has reached an advanced stage for the remaining section.

V. Financing

Local financing received or expected:	$21.00 million
External financing secured:	Nil
External financing required	$62.00 million

Project No. ROP-18-013

GHANA: STUDY ON THE KPONG-ASIKUMA-JUNCTION-KPEVE-HOHOE-JASIKAN ROAD

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Studies for the construction of existing road to higher standard

Location: Eastern Ghana

Cost: $0.48 million

External financing required: $0.48 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The aim is to carry out studies for the improvement of the existing road. The project is part of the connector route linking the Sahelian and Coastal routes of these trans-West African highways passing through Ghana. Though the project is described as Kpsong-Jasikan, it really starts from Atimpoku, a settlement about 16 km north of Kipong.

2. Nature and constituent parts

The project consists of studies for the upgrading of the pavement and alignment of the southern section (Atimpoku-Asiknuma Junction) and the northern section (Kpeve-Jasikan) to conform to the middle section (Asikuma Junction-Kpeve) of the road under consideration as phase I, and at a later date, to strengthen pavement to asphalted surface over crushed rock base.

The road may be divided into three sections: the southern section is the 27 km portion from Atimpoku to Asikuma Junction; the middle section is between Asikuma Junction and Kpeve, and the northern section is approximately 91 km in length from Kpeve to Jasikan. The middle section is a 7.3 m single carriageway with good bitumen surface over good gravel base; vertical and horizontal alignments along this section are good. The other section considered project have carriageway widths varying from 5.6 m to 6.5 m. The bitumen surface of most parts of these sections is poor and the gravel base is only fair to poor. Horizontal and vertical alignments also need improvement.

III. Justification; economic and financial analysis

1. Context and benefits

The improvement of this road will help to accommodate possible diverted north-south traffic and traffic resulting from inter-West African trade. The road is a section of the route providing the shortest link between northern Ghana and the port town of Tema and the capital Accra, both of which are in the south. In addition its improvement will lead to reduction in travel times and in vehicle running cost. It will also bring to a fairly uniform standard the characteristics of the road from Tema through Kpeve to Jasikan.

2. Cost

The cost of the project is estimated at $0.48 million.

IV. Status

Survey and design of some sections of the road have already been completed though it may require about four to six months to complete the unsurveyed sections.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.48 million

Project No. ROP-18-014

GHANA: BITUMEN SURFACING OF THE JASIKAN-NKWANTA-BIMBILLA ROAD (194 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implication

Nature: Rehabilitation of the existing road

Location: Eastern Ghana

Cost: $67.27 million

External financing required: $50.45 million

Duration: Four years

Desirable starting date: 1984

Project initiator: Ministry of Works and Housing

Project management authority: Ghana Highway Authority

II. Description

1. Aim and objective

The objective of the project is to make the engineering characteristics of this section uniform with the proceding southern sections; to make provision for anticipated growth in traffic on the road as a result of West African countries trade and diverted traffic; and to help ensure easy evacuation of agricultural produce, mainly cocoa and yams.

The road is the continuation of the shortest connector route linking the port town of Tema and the capital Accra, with northern Ghana and Trans-Sahelian route of the Trans-West African Highway.

2. Nature and constituent parts

The project consists of the rehabilitation of Jasikan to Nkisanla (111 km) and Nkwanta to Bimbilla (83 km) roads.

The existing road is a gravel road with narrow sections and moderate alignments. Because of inadequate maintenance along most of its section, the road has deteriorated considerably. The surface is quite bumpy and the drainage is poor. Due to this, the traffic tends to be quite low on the route averaging some 150 vpd on Jasikan-Nkwanta section and about 100 vpd between Nkosanta and Bimbilla.

III. Justification; economic and financial analysis

1. Context and benefits

This road traverses the richest agricultural land of the Volta Region producing cocoa and foodstuffs, mainly yams and plantain. Inadequate maintenance has rendered parts of the area inaccessible during the rainy season, thus leaving some of the produce to rot and also encouraging the sale of the produce across the border which is just nearby. Its improvement to good standard is therefore expected to ensure easy evacuation of produce all year round. It will also accommodate projected growth in north-south traffic,

reduce the running cost of vehicles and will help prolong vehicle lives.

2. Cost

The cost of the project is estimated at $67.27 million.

IV. Status

The study is completed and tenders have been invited for the project.

V. Financing

Local financing received or expected:	$16.82 million
External financing secured:	Nil
External financing required:	$50.45 million

Project No. ROP-18-015

GHANA: STUDY FOR SETTING UP A VOCATIONAL TRAINING CENTRE FOR VEHICLE TESTING

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project

Nature: Training of personnel

Location: Ghana

Cost: $0.20 million

External financing required: $0.20 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ghana Highway Authority

Project management authority: Department of Roads

II. Description

1. Aim and objective

The objective of this project is to establish a centre for testing vehicles so as to reduce the number of traffic accidents due to faulty vehicles.

2. Nature and constituent parts

The project comprises socio-economic studies to justify the validity of testing vehicles in order to ensure safety on the roads.

III. Justification; economic and financial analysis

1. Context and benefits

Accidents caused by faulty vehicles are very frequent, leading to cosniderable loss of human life.

The Chara Government intends to establish this centre to train technicians who will be responsible for assessing the road worthiness of vehicles using both the national and international road networks.

2. Cost

The cost of the project is estimated at $0.20 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.20 million

Project No. ROP-19-001

GUINEA: CONSTRUCTION OF THE GUECKEDOU-SEREDOU-N'ZEREKORE-LIBERIA BORDER ROAD (303 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Construction of an earth road linking Guinea with Liberia through N'Zerekore

Location: South-eastern Guinea

Cost: $182.00 million

External financing required: $87.00 million

Duration: Three to four years

Desirable starting date: 1984

Project initiator: Ministry of National Development

Project management authority: Highways Department.

II. Description

1. Aim and objective

The purpose of this project is to link Guinea to Liberia through forest areas with enormous economic potential. This road will serve as a permanent road link between Guinea and Liberia.

2. Nature and constituent parts

The project consists in the construction of 284 km of road to bitumen standard in two phases.

Phase one: Gueckedou-Seredou
Phase two: Seredou-N'zerekore
Supervision: $4.60 million

III. Justification: economic and financial analysis

1. Context and benefits

The main benefit of the project is the substantial improvement of road links between Guinea and Liberia resulting in increased trade exchanges between the two neighbouring countries.

2. Cost

The cost of the project is estimated at $182.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	$95.00 million
External financing required:	$87.00 million

Project No. ROP-19-002

GUINEA: CONSTRUCTION OF THE DUBREKA-BOKE ROAD (200 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Construction of an earth road linking Dubreka to Boke via Boffa

Location: Western Guinea

Cost: $125.00 million

External financing required: Nil

Duration Three years

Desirable starting date: 1984

Project initiator: Ministry of National Development

Project management authority: Highways Department

II. Description

1. Aim and objective

The objective is to construct the 200 km road between Dubreka and Boke.

2. Nature and constituent parts

The project consists in the construction of an all-weather 200 km long road. The basic speed will be 100 km/h. The road will be divided into two sections, namely Dubreka-Boffe (94.49 km) and Boffa-Kalaboui (103.96 km) section.

III. Justification; economic and financial analysis

1. Context and benefits

The region served by this road has bauxite deposits which constitute a source of foreign currency for Guinea. The headquarters of the Guinea Bauxite Mining Company is in the area.

2. Cost

The cost of the project is estimated at $125.00 million.

IV. Status

Contract for the study already concluded.

V. Financing

Local financing received or expected:	$25.00 million
External financing secured:	$100.00 million
External financing required:	Nil

Project No. ROP-19-003

GUINEA: RECONSTRUCTION OF THE CONAKRY-MAMOU ROAD (255-KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Reconstruction of the Conakry-Mamou road to bitumen standard

Location: Southern Guinea

Cost: $24.00 million

External financing required: $9.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of National Development

Project management authority: Highways Department

II. Description

1. Aim and objective

The Conakry-Mamou road is the first and most used section of the major road which goes right across the country, starting from Conakry, the political, administrative and economic capital, and a major port for goods and some mineral products. All roads leading to the various regions and to neighbouring countries branch off from this road. Considering the fact that Conakry is situated on a peninsula, traffic from and to Conakry inevitably have to use this first section of the road.

2. Nature and constituent parts

The project consists in the repair and reinforcement of the Conakry-Mamou road to give it geometric specifications corresponding to a reference speed of 80 km/h. The roadway will be 7 m wide on 9 m of roadbed on the retained sections and 11 m on the new sections with asphalted shoulders in towns and villages.

III. Justification: economic and financial analysis

1. Context and benefits

The reconstruction of this road with improved technical specifications will help reduce maintenance and operating costs as well as road accidents.

2. Cost

The cost of the project is estimated at $24.00 million

IV. Status

Studies are near completion.

V. Financing

Local financing received or expected:	Nil
External financing secured:	$15.00 million
External financing required:	$9.00 million

Project No. ROP-19-004

GUINEA: STUDY ON THE MAMOU-DABOLA-KOUROUSSA-KANKAN ROAD (410 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Study for the construction of a road between Mamou and Kankan via Kouroussa

Location: East-central Guinea

Cost: $1.60 million

External financing required: $1.60 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of National Development

Project management authority: Highways Department

II. Description

1. Aim and objective

The objective is to carry out studies for the construction of a road between Mamou and Kankan via Kouroussa.

2. Nature and constituent parts

The project consists of studies for the construction of a 410-km dual carriage bitumen-surfaced road, half of which is in mountainous areas and a bridge on the Niger River between Kouroussa and Kankan. The basic speed will be 100 km/h, the road will be 7 m wide on a road bed 9 m wide; the axle weight will be 13 tons.

III. Justification; economic and financial analysis

1. Context and benefits

Important agricultural projects, cotton development in particular, are envisaged in Dabola and Dinguiraye as well as the exploitation of bauxite deposits at Dabola, Tougné, Kankan, Siguiri and Mandiana. In addition there is a very rich agricultural area towards the east. A part of Mali's foreign trade will be forwarded through Guinea.

Apart from savings in transport costs, the implementation of the project will bring definite benefits for the development of international trade with Mali and the Ivory Coast and for opening up a central region in Guinea.

2. Cost

The cost of the project is estimated at $1.60 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.60 million

Project No. ROP-19-005

GUINEA: STUDY ON THE KANKAN-MANDIANA-BADOGO ROAD (287KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Studies for the construction of a road to link Kankan to Bougouni

Location: Centre-eastern Guinea

Cost: $2.00 million

External financing required: $2.00 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of National Development

Project management authority: Highways Department

II. Description

1. Aim and objective

The objective is to carry out studies for the construction of a road to link Kankan to Bamako through the towns of Mandiana in Guinea and Yanfobila in Mali and will go through an agricultural region.

2. Nature and constituent parts

The project consists in studies for the construction of a modern earth road and a bridge 150 m long on the Sankarani river.

III. Justification; economic and financial analysis

1. Context and benefits

Undoubtedly, a good road link will help generate trade exchanges between Guinea and Mali. Also, the Kankan-Bougouni road could be used to transport wood from Guinea to Mali, the volume of which is estimated at 40,000 tons per year. The road will also help to increase trade between Guinea and the Odienne region in the Ivory Coast. Considering the ethnic affinities existing between Mali, Guinea, the Ivory Coast and the Upper Volta, heavy passenger traffic will definitely be established between these countries.

2. Cost

The cost of the project is estimated at $2.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$2.00 million

Project No. ROP-19-006

GUINEA: STUDY ON THE BOKE-QUEBO ROAD (200 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Studies for the construction of a road linking Guinea to Guinea Bissau

Location: North-western Guinea

Cost: $2.00 million

External financing required: $2.00 million

Duration 18 months

Desirable starting date: 1985

Project initiator: Ministry of National Development

Project management authority: Highways Department

II. Description

1. Aim and objective

The objective is to carry out studies for the construction of an international transit route between Guinea and Guinea-Bissau and even Senegal. It is the only road serving the major agricultural area west of Boké in Guinea. In Guinea-Bissau, it is the road used in the transportation of goods (besides the waterways).

2. Nature and constituent parts

The project consists in study leading to construction of the gravel road (without asphalt) 7 m wide on a road bed 9 m long. The basic speed will be 85 km/h and the axle load 13 tons.

III. Justification: economic and financial analysis

1. Context and benefits

The project will improve the link between the two countries and help enhance trade exchanges and movement of people between them.

The road will also help to open up some areas which are inaccessible during the rainy season.

2. Cost

The cost of the project is estimated at $2.00 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$2.00 million

Project No. ROP-19-007

GUINEA: STUDIES ON THE LABE-TAMBACOUNDA ROAD (425 KM, OF WHICH 300 KM IS IN GUINEA)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Studies for the construction of an earth road linking Labe to the undeveloped basin in Senegal and Guinea

Location: North-western Guinea

Cost: $1.50 million

External financing required: $1.50 million

Duration: Three years

Desirable starting date: 1986

Project initiator: Ministry of National Development

Project management authority: Highways Department

II. Description

1. Aim and objective

The objective is to carry out studies for the construction of the Labe-Tamabacounda road for which bitumen surfacing is jointly sought by the Governments of both Guinea and Senegal. This road is to become a permanent road link between Tambacounda in Senegal and Labe in Guinea. It is also part of the West African road development programme.

2. Nature and constituent parts

The project will consist in studies leading to upgrading of the road surface. The road bed will be 9 m long for a roadway 7 m wide. The basic speed will be 100 km/h.

The study undertaken by SONED (Senegal) provides for two alternatives, one for an unsurfaced road and one for a bitumen surfaced road.

III. Justification: economic and financial analysis

1. Context and benefits

The development plans of Guinea and Senegal for the still unexploited basin require the improvement of this road. Furthermore trade between the two countries will be facilitated through the upgrading of this road of complementary economic interest.

2. Cost

The cost of the project is estimated at $1.50 million.

IV. Status

Feasibility studies are already completed.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.50 million

Project No. ROP-19-008

GUINEA: STUDY ON FORECARIAH-PAMELAP ROAD (43 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Economic and engineering studies for the construction of 43 km of road between Forecariah and Pamelap

Location: South-eastern Guinea

Cost: $0.75 million

External financing required: $0.60 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of National Development

Project management authority: Roads Department

II. Description

1. Aim and objective

The objective is to carry out studies for the construction of a road to link Guinea to Sierra Leone. This section of road is part of the Lagos-Nouakchott Trans-West African Highway.

2. Nature and constituent parts

The project consists in economic and engineering studies for the construction of 43 km of road between Forecariah and Pamelap.

III. Justification: economic and financial analysis

1. Context and benefits

The Forecariah-Pamelap road is part of the Lagos-Nouakchott Trans-West African Highway and should be constructed in order to realize the envisaged subregional integration.

2. Cost

The cost of the project is estimated at $0.75 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$0.15 million
External financing secured:	Nil
External financing required:	$0.60 million

Project No. ROP-20-001

GUINEA-BISSAU: CONSTRUCTION OF THE SAO VICENTE-SAO DOMINGOS-M'PAK ROAD (78 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Construction of a modern earth road from Sao Vicente to M'pak (Senegal border) via Sao Domingos

Location: North-western Guinea-Bissau

Cost: $12.00 million

External financing required: $6.00 million

Duration: Three years

Desirable starting date: 1983

Project initiator: The Government

Project management authority: Ministry of Public Works, Construction and Town Planning; Highways Department

II. Description

1. Aim and objective

The objective of the project is to contribute to the completion of the Nouakchott-Lagos trans-West African Highway and to make a reliable traffic possible by means of an all-weather road to open up Guinea-Bissau to Senegal.

2. Nature and constituent parts

The project consists of the construction of a modern all-weather earth road between Bissau, the capital city, and Senegal.

III. Justification; economic and financial analysis

1. Context and benefits

Efforts to reconstruct the country notably concern the extension of the all-weather road network which affords the only possibility of opening up the hinterland and linking the neighbouring countries. Thus the project will make it possible to maintain a permanent link between Bissau, Senegal and the Gambia.

2. Cost

The cost of the project is estimated at $12.00 million.

IV. Status

Engineering studies have been completed.

V. Financing

Local financing received or expected:	Nil
External financing secured:	$6.00 million
External financing required:	$6.00 million

Project No. ROP-20-002

GUINEA-BISSAU: CONSTRUCTION OF THE XITOLE-MAPUTE-CONTABONE-QUEBO ROAD (38 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project for a disadvantaged country

Nature: Construction of a modern earth road

Location: South-eastern part of the country (Rio Corubal region)

Cost: $5.60 million

External financing required: $5.40 million

Duration: Two years

Desirable starting date: 1985

Project initiator: The Government

Project management authority: Ministry of Public Works, Construction and Town Planning, Highways Department

II. Description

1. Aim and objective

The objective is to link up the road network which is at present broken up between Xitole (now linked with the northern network) and Quebo and to develop the zone of rich palm plantations on either side of the Rio Corubal.

2. Nature and constituent parts

The project consists in the construction of the road to the specifications of a modern all-weather earth road and constructing a bridge of about 80 m on the Rio Corubal.

III. Justification; economic and financial analysis

1. Context and benefits

This project will ensure the development of the vast palm plantation zone and make the deep-water port of Buba accessible via Quebo and the now asphalted Quebo-Buba road.

2. Cost

The cost of the project is estimated at $5.60 million

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	$0.20 million
External financing secured:	Nil
External financing required:	$5.40 million

Project No. ROP-20-003

GUINEA-BISSAU: STUDY ON CONSTRUCTION OF A ROAD BETWEEN TO LINK QUEBO AND BAKE VIA GADAMAEL (GUINEA BORDER) (60 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications for a disadvantaged country

Nature: Modern earth road, to be eventually asphalted

Location: Southern peninsula of Guinea Bissau

Cost: $0.15 million

External financing required: $0.15 million

Duration: One year

Desirable starting date: 1984

Project initiator: The Government

Project management authority: Ministry of Public Works, Construction and Town Planning; Highways Department

II. Description

1. Aim and objective

The objective is to carry out studies for the construction of a road to develop the port of Buba which is exceptionally well-protected and accessible to the biggest ships (more than 120,000 tons.) to serve Guinea and to reduce transport costs in an area with high agricultural output.

2. Nature and constituent parts

The project consists of studies for the construction of a modern earth road which would later on be asphalted and which would extend towards Guinea the Buba (port) -Quebo road which is at present under repair.

III. Justification; economic and financial analysis

1. Context and benefits

This road will make it possible to develop the port of Buba to serve Guinea. This deep water port at the head of a long estuary is exceptionally well-placed to extend its activities to isolated parts of the territory of Guinea-Conakry.

It will also make it possible for a zone with high agricultural potential to evacuate its products through Buba and hence out of the country.

2. Cost

The cost of the project is estimated at $0.15 million.

IV. Status

No information is available on the project status.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.15 million

Project No. ROP-21-001

IVORY COAST: STUDIES ON THE FERKESSEDOUGOU-OUANGOLODOUGOU-MALI BORDER AND THE OUANGOLODOUGOU-UPPER VOLTA BORDER ROADS

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Studies for the construction of bitumen roads: Ferkessedougou-Ouangolodougou (44 km); Ouangolodougou-Mali border (91 km); Ouangolodougou-Upper Volta (31 km)

Location: Northern Ivory Coast, near the Mali and the Upper Volta borders

Cost: $1.00 million

External financing required: $1.00 million

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Transport, Construction and Town Planning

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to help in giving access to the sea to Mali and the Upper Volta, the aim being to provide these two land-locked countries with a continuous bitumen road link to the Ivory Coast port of Abidjan.

2. Nature and constituent parts

The project consists of studies for the construction of a bitumen road in the Ivory Coast on the following three sections: Ferkessedougou-Ouangolodougou (44 km); Ouangolodougou-Mali border (91 km); Ouangolodougou-Upper Volta border (31 km).

III. Justification; economic and financial analysis

1. Context and benefits

Mali and the Upper Volta are both land-locked countries. Mali's main access routes to the sea are through the ports of Dakar and Abidjan. Access from Bamako to Dakar is by railway; from Bamako to Abidjan it may be either directly by road or by combined road and rail (Abidjan-Niger railway); off-loading on the railway can take place either at Ouangolodougou in the Ivory Coast or at Bobo-Dioulasso in the Upper Volta, where there are considerable trans-shipment facilities. Access to the ports of San Pedro (Ivory Coast) and Conakry (Guinea) is at present difficult because of the mediocrity of road links. The Upper Volta has both rail and road connections with the port of Abidjan; it also has road links with the ports of Lome, Tema and Cotonou.

There is a bitumen road in the Ivory Coast between Abidjan and Ferkessedougou; there is also a bitumen road in Mali between Bamako and the Ivory Coast border; bitumen surfacing was underway in the Upper Volta, between Bobo-Dioulasso and the Ivory Coast border in 1979; the work was to have been completed in June 1981.

The three sections of the project will make it possible to establish a continuous bitumen road connection from Mali to the Upper Volta on the one hand and the port of Abidjan on the other; access from Mali to Ouangolodougou station will also be facilitated.

At a high-level political meeting in January 1979, the three countries decided to accelerate the implementation of the project in view of its international character. The main benefit of the project is in helping to give access to the sea to Mali and the Upper Volta.

The internal rate of return of the project has been estimated at 11 per cent between the Mali border and Ouangolodougou and at 15.7 per cent between Ferkessedougou and Ouangolodougou; no estimate has been made for the section between Ouangolodougou and the Upper Volta border.

2. Cost

The cost of the project is estimated at $1.00 million.

IV. Status

The engineering design is partly completed.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.00 million.

Project No. ROP-21-002

IVORY COAST: BITUMEN-SURFACING OF THE GUIGLO-TOULEPLEU-LIBERIA BORDER ROAD (140 KM) AND THE DALOA-GUETHZON ROAD

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications

Nature: Construction of a bitumen-surfaced road between Guiglo-Toulepleu and Liberia border (140 km) and Daloa-Guetuzon sections

Location: South-western Ivory Coast

Cost: $61.00 million

External financing required: $35.40 million

Duration: Three to four years

Desirable starting date: 1987

Project initiator: Ministry of Public Works, Transport, Construction and Town Planning

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to construct a 140-km bitumen-surfaced road between Guiglo-Toulepleu and the Liberia border.

2. Nature and constituent parts

The project comprises the construction of a bitumen-surfaced road with a 7 m wide roadway, a 2 m wide shoulder and a design speed of 100 km/h, as well as the construction of a bridge over the Carally river which runs parallel to the Liberia border and crosses the road at approximately 10 km east of Toulepleu.

III. Justification, economic and financial analysis

1. Context and benefits

The bitumen surfacing of the road will make its use very economical. The road will open up an area which produces large quantities of coffee and cocoa. Besides, the road could serve as a short-cut to the sea port of San Pedro.

2. Cost

The cost of the project is estimated at $61.00 million.

IV. Status

Detailed engineering studies and preparation of tender documents have been completed.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$61.00 million

Project No. ROP-21-003

IVORY COAST: STUDY ON THE ODIENNE-MALI BORDER ROAD (117 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (Abidjan-Mali corridor)

Nature: Studies for the construction of a bitumen-surfaced road between Odienne and the Mali border (117 km)

Location: North-western Ivory Coast

Cost: $0.90 million

External financing required: Nil

Duration: One year

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Transport, Construction and Town Planning

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to undertake studies for the construction of a 117-km all-weather road between Odienne and the Mali border.

2. Nature and constituent parts

The project comprises feasibility studies, detailed engineering studies for the construction of roads and bridges as well as preparation of invitations for bids.

III. Justification; economic and financial analysis

1. Context and benefits

The road will give Mali access to the sea and promote trade and transport between Mali and the Ivory Coast. Since it is shorter to go by the Mali border - Odienne road to the sea, than by the eastern road which passes through Sikasso and Bouake, users of the road will be able to save time and money worth about a third of the cost of travelling from Bamako through Boukouni to the Ivorian ports. Finally, giving Mali this access to the sea will facilitate the delivery of emergency supplies to the people of the region during drought periods.

2. Cost

The cost of the project is estimated at $0.90 million.

IV. Status

The construction of the Mali section of the road is in progress whereas the Ivory Coast section has not yet been started.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$0.90 million

Project No. ROP-21-004

IVORY COAST: DRIVER TRAINING UNITS

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project

Nature: Establishment of four centres for training drivers of heavy vehicles; each centre will have the capacity for training 100 drivers a year

Location: The Ivory Coast

Cost: $2.50 million for the initial period, including training of instructors

External financing required: $1.50 million

Duration: Two years

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Transport, Construction and Town Planning

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to establish four centres for training drivers of heavy vehicles and to purchase the necessary equipment and teaching aids. Technical assistance will be required during the first 18 months of the project.

2. Nature and constituent parts

The project comprises purchase of 10 trucks for practical training, as well as teaching aids, training equipment and furniture for the offices. Technical assistance will be required during the first 18 months of the project.

III. Justification; economic and financial analysis

1. Context and benefits

This project is related to the one launched by the "Conseil de l'Entente pour la formation de chauffeurs professionnels des transport routiers". A similar centre established at Niamey has been in operation since 1980; other centres are planned for Benin, Upper Volta and Togo. With the increase in the number of vehicles and the extension of the national and international road networks, the need to train drivers to ensure road safety has become imperative.

2. Cost

The cost of the project is estimated at $2.50 million.

IV. Status

The Ivory Coast shall finance the construction of the buildings and the establishment of infrastructure and also bear administrative costs.

V. Financing

Local financing received or expected:	20 per cent
External financing secured:	$1.00 million
External financing required:	$1.50 million

Project No. ROP-21-005

IVORY COAST: STUDY ON THE GHANA-ABIDJAN-SAN PEDRO-TABOU-LIBERIA COASTAL ROAD (469 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications.

Nature: Studies for the construction of a coastal road to link the Ivory Coast with Ghana and Liberia borders

Location: Southern Ivory Coast, along the Gulf coast

Cost: $4.19 million

External financing required: $4.19 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Public Works, Transport, Construction and Town Planning

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to undertake studies for the construction of two sections of bitumen surfaced roads between Abidjan and San Pedro (309 km) and between Satac-Tabou and the Liberia border (30 km).

2. Nature and constituent parts

Originally, the project consisted in undertaking studies for the construction of a coastal road from the Ghana border to the Liberia border. The sections of the road between Abidjan and the Ghana border has now been completed. A draft programme was prepared for the Abidjan-San Pedro section and the "Direction générale des travaux publics" intends to undertake the engineering studies itself.

III. Justification; economic and financial analysis

1. Context and benefits

One of the main benefits to be derived from the project will be the improvement of road links between the three coastal countries, Ghana, Ivory Coast and Liberia. The project will also promote trade and improve relations between these countries.

This road will complete the coastal link between Abidjan, Accra and Monrovia, another international road link.

2. Cost

The cost of the project is estimated at $4.19 million.

IV. Status

According to the information available at ECA funds amounting to $66.95 million were received for the construction of the Ghana-Abidjan road. Funds are now required for the construction of the Abidjan-San Pedro-Liberia border road.

V. Financing

Local financing received or expected:	$66.95 million
External financing received:	Nil.
External financing required:	$4.19 million

Project No. ROP-21-006

IVORY COAST: STUDY ON THE MAN-DANANE ROAD (120 KM)

I. Identification and summary

Origin of the project: Submitted by the Government

Sub-sector: Roads and road transport

Order of priority: National project with subregional implications (feeder to the Lagos-Tanger Trans-African Highway)

Nature: Studies for the reconstruction and bitumen surfacing of a 120-km long road

Location: Central-western Ivory Coast

Cost: $1.00 million

External financing required: $1.00 million

Duration: Three years

Desirable starting date: 1984

Project initiator: Ministry of Works, Transport, Construction and Planning

Project management authority: Public Works Department

II. Description

1. Aim and objective

The objective of the project is to undertake studies for the construction of a 120-km bitumen surfaced road between Man and Danane.

2. Nature and constituent parts

The project consists in undertaking studies for the reconstruction and bitumen surfacing of the recently improved existing earth road.

III. Justification: economic and financial analysis

1. Context and benefits

This road will open up a remote area in the Ivory Coast and provide access to the Ivory Coast and thus to the sea for south-eastern Guinea. This will promote international trade and transport between the two countries via the San Pedro port and also facilitate the exportation of agricultural products and livestock from the area served.

2. Cost

The cost of the project is estimated at $1.00 million.

IV. Status

The project is yet to start.

V. Financing

Local financing received or expected:	Nil
External financing secured:	Nil
External financing required:	$1.00 million